Attachment 1

Summary of the ISO Department of Market Analysis Study on the Economic Benefits to California Load from Expanding Path 15

Summary of the ISO Department of Market Analysis Study on the Economic Benefits to California Load from Expanding Path 15[1]

This document provides a brief summary of a study completed by the ISO Department of Market Analysis that examined the potential economic benefits to California load from upgrading Path 15. This study, which was filed with the CPUC in September 2001, assessed the economic benefits of upgrading Path15, with a particular emphasis on how the proposed upgrade would generate benefits from reducing the ability of energy suppliers to exercise market power.

The DMA employed a methodology that uses the statistical relationship between a Residual Supply Index (RSI), system load, and Lerner Indices[2] to predict the extent that suppliers will be able to increase prices above competitive levels. The RSI is a measure of whether the largest seller in a particular market is pivotal in the sense that total market demand could not be met absent that seller's supply. An RSI value less than 100% would indicate the largest supplier is pivotal and thus would have the ability to set the market-clearing price. In the analysis, the DMA calculated hourly RSI values for northern California (NP15) under various supply scenarios in 2005 and with and without the proposed expansion of Path15 to capture how the potential added transmission capacity would mitigate market power.

To estimate the cost impact of market power, the DMA first examined how market power has historically impacted market prices using computed RSIs and price-cost markups in year 2000. The DMA found that there is a strong statistical relationship between Lerner Indices, RSIs, and CA ISO system loads. The estimated coefficients from this analysis are used to project price-cost markups for the RSI estimates in 2005. Finally, the computed price-cost markups are applied to the projected competitive market prices to produce the costs due to exercising market power with and without the Path 15 expansion. The total cost benefits to NP15 load for year 2005 are the sum of the differences in these costs (with and without the Path15 expansion) for all hours in 2005.

The results from this analysis indicate that there is a potentially significant economic benefit from upgrading Path 15 in terms of mitigating costs associated with market power in northern California. Based on the recently updated information on factors, such as unavailability of ETC capacity, new generation, and firmness of long term contracts, the annual benefit from this project in a normal hydro year are estimated to be approximately $104 million, whereas projected benefits from the upgrade in a drought year would be $306 million[3].

[1] See "Potential Economic Benefits to California Load from Expanding Path 15 – Year 2005 Prospect", Keith Casey, Ph.D. and Jing Chen, Ph.D., ISO Department of Market Analysis. September 24, 2001.
[2] The Lerner Index measures the extent to which an actual price (P) exceeds the marginal cost of production (C) and is equal to (P-C)/P.
[3] See "Opening Brief of the California Independent System Operator on Path 15 Benefits", which was filed with the CPUC (I.00-11-001, A.01-04-012) on April 10, 2002.

The Proposed WAPA Path 15 Project

The Western Area Power Administration (WAPA), Trans-elect, and Pacific Gas and Electricity Company submitted a filing to the FERC on April 29, 2002 proposing to undertake the Path 15 Upgrading project. Based on information provided to the DMA on the annual revenue requirement of each company, the DMA found that the 30-year cost of this project, in present value terms, is approximately $473 million, which is approximately equals the DMA's estimate of the economic benefits over a 4-year period, assuming three normal hydro years and one low hydro year (see Table 1 below).[4] The DMA did not extend the benefit analysis beyond 4-years because the study results were based solely on supply and demand projections in year 2005. Extrapolation of the estimated benefits beyond 4-years would be inappropriate because supply and demand conditions are likely to change significantly from those projected in 2005. However, the DMA believes that upgrading this critical link between northern and southern California will likely continue to provide significant economic benefits after the initial four-year period. Additionally, there will be important reliability benefits from this project that are not explicitly quantified in the DMA's analysis.

Table 1
Comparison of Economic Benefit and Cost to Upgrading Path 15

	Economic Benefit ($ in million)	Present Value of Economic Benefit ($ in million) *
1: Normal Hydro Year	$104	$95
2: Normal Hydro Year	$104	$87
3: Normal Hydro Year	$104	$79
4: Dry Hydro Year	$305	$213
Total Economic Benefit (1+2+3+4)	$617	$474
Estimated Project Cost **		$473
Net Present Value		$1

* A discount rate of 9.4 percent is used in computation.
** Estimated Project Cost is the present value of the 30-year annual revenue requirements from the participating companies discounted at 9.4 percent.

[4] A discount rate of 9.4 percent is based on the rate recently approved by CPUC for some utility-sponsored transmission projects.

Attachment 2

Opening Brief of the California Independent System Operator on Path 15 Benefits in docket # A.01-4-012 and Docket # I.00-11-001

CALIFORNIA ISO

California Independent
System Operator

April 10, 2002

Commission's Docket Office
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

RE: Docket # A 01-04-012: Conditional Application of Pacific Gas and Electric Company (U 39 E) for a Certificate of Public Convenience and Necessity Authorizing the Construction of the Los Banos-Gates 500 kV Transmission Project and Docket # I 00-11-001: Order Instituting Investigation into implementation of Assembly Bill 970 regarding the identification of electric transmission and distribution constraints, actions to resolve those constraints, and related matters affecting the reliability of electric supply.

Dear Docket Clerk:

Enclosed please find an original and eight copies of the Opening Brief of the California Independent System Operator on Path 15 Benefits in Docket # A.01-04-012 and Docket #I.00-11-001. Please date-stamp one copy and return to the California ISO in the self-addressed stamped envelope enclosed.

Thank you.

Sincerely,

Jeanne M. Solé
Regulatory Counsel

Cc: Service List A. 01-04-012/I. 00-11-001

PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Investigation into implementation of Assembly Bill 970 regarding the identification of electric transmission and distribution constraints, actions to resolve those constraints, and related matters affecting the reliability of electric supply.	)	I.00-11-001
Conditional Application of Pacific Gas and Electric Company (U 39 E) for a Certificate of Public Convenience and Necessity Authorizing the Construction of the Los Banos-Gates 500 kV Transmission Project	)	A. 01-04-012

OPENING BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON PATH 15 BENEFITS

Charles F. Robinson, General Counsel
Jeanne M. Solé, Regulatory Counsel
California Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
Telephone: 916-351-4400
Facsimile: 916-608-7222

Dated: April 10, 2002

TABLE OF CONTENTS

TABLE OF AUTHORITIES

I. INTRODUCTION AND SUMMARY

In accordance with California Public Utilities Commission Rule 75 and the oral ruling of Administrative Law Judge (ALJ) Gottstein, the California Independent System Operator Corporation (CA ISO) respectfully submits its opening brief in the above captioned case. In this phase of the proceeding, the California Public Utilities Commission (CPUC) is assessing the benefits from upgrading Path 15 by adding approximately 1500 MW of transfer capability.

Based on a $300 million cost estimate by Pacific Gas and Electric Company (PG&E), the CA ISO strongly believes that the Path 15 upgrade should be undertaken in order to support a workably competitive wholesale electricity market.[1] First, the CA ISO considers that, given the experience of the California electricity markets over the past two years, and the severe and rapid manner in which the exercise of market power can destabilize the wholesale electricity markets and cause significant consumer harm, it is imperative that aggressive progress be made on all the key fronts that affect the ability of suppliers to exercise market power. Key actions include putting into place the necessary transmission infrastructure, assuring adequate supplies, developing demand response, and putting into place adequate long-term contracts. Each of these actions is important and has been adopted by the CA ISO as part of its ongoing Market Design 2002 effort. Moreover, each of these actions taken alone is less likely to be effective than a comprehensive approach. Accordingly, there should be an aggressive effort to pursue all actions needed to support a workably competitive market. Further, the CA ISO considers that it would be risky and short-sighted to rely, on an on-going basis, on effective regulatory intervention and price mitigation by the Federal Energy Regulatory Commission (FERC) as an alternative to a

[1] Although the Path 15 upgrade has not been presented to the CA ISO Governing Board, the position of the CA ISO as set forth in its testimony was shared with the Governing Board on September 30, 2001. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 4: 24. The Path 15 upgrade has not be presented to the CA ISO Governing Board because the details and technical specifications of the project are not yet final. Tr. (Greenleaf) at 535: 27-28; at 536:1-6.

comprehensive effort to put into place the structural elements necessary to support a competitive market. As the CA ISO has stated repeatedly, collective and timely action by state and federal policymakers is necessary if California is to remedy identified problems in the electricity markets.

Second, although the market power mitigation benefits are sensitive to a number of key factors, the record indicates that under the scenario that is currently most plausible, a $300 million Path 15 upgrade cost could easily be recovered within four years, even after reducing the benefits in the most likely scenario by 25% to account for the uncertainty associated with the key parameters and biases in the analysis. The CA ISO has revised its initial conclusions about the most realistic scenario: in the case of its assessment of new generation development in California, based on new information; and in the case of assumptions about the availability in 2005 of capacity subject to Existing Transmission Contracts (ETCs) and the level of protection afforded by the California Department of Water Resources' (CDWR) long term electricity contracts, based on a more accurate assessment of these factors developed during the course of the hearings. These revisions further highlight the potential benefits of a Path 15 upgrade.

Finally, the CA ISO notes that in less likely, but still possible scenarios, the benefits of the upgrade exceed the entire upgrade cost in one year; or put another way, the cost to consumers of not upgrading Path 15 could be very substantial; whereas the maximum total cost to consumers of going forward with the upgrade is the upgrade cost. Thus, the risks of not upgrading the Path versus the risks of going forward are far from symmetrical.

In sum, the CA ISO considers that upgrading Path 15 is an important component to support a workably competitive wholesale electricity market, and well worth the $300 million estimated project cost.

II. THE PATH 15 UPGRADE IS ONE OF SEVERAL KEY STRUCTURAL ELEMENTS THAT SHOULD BE PUT INTO PLACE TO SUPPORT A WORKABLY COMPETITIVE MARKET.

The CA ISO supports upgrading Path 15, as one of several key structural elements to create a workably competitive wholesale electricity market. An underlying theme that has emerged in this proceeding is whether a transmission project of the magnitude of the Path 15 upgrade should be undertaken primarily to reduce the ability of suppliers to exercise market power, and support a workably competitive wholesale market. The CA ISO considers that the answer to this question is a firm "yes" for a number of reasons:

- It is risky to rely on a continued effective market power mitigation program on the part of FERC in lieu of correcting the structural deficiencies that enable suppliers to exercise market power.
- To adequately mitigate the ability of suppliers to exercise market power, actions to correct all the key structural deficiencies in the market should be pursued aggressively, as an exclusive focus on one or another of the structural deficiencies is unlikely to be as effective as a combination of strategies.
- The Path 15 upgrade would address a constraint in the backbone transmission system with statewide and regional significance.

As stated by witness Casey, the CA ISO acknowledges that in determining what actions to take to mitigate market power, it is appropriate to review the market power benefits of the actions versus their cost. Tr. (Casey) at 557: 24-28; at 558: 1-10. The issue of benefit-cost is reviewed in the following section. As a general matter, however, as described in further detail below, the CA ISO strongly believes that the addition of critical transmission infrastructure, such

as upgrading Path 15, is among the key strategies that should be assessed and, where cost-effective, undertaken to mitigate the ability of suppliers to exercise market power and to provide the structural framework for a workably competitive wholesale electricity market.

A. It is Risky to rely on Continued FERC Effective Market Power Mitigation Programs Without Taking Steps to Address Structural Market Deficiencies.

The Office of Ratepayer Advocates (ORA) has questioned the value of upgrading Path 15 to mitigate the ability of suppliers to exercise market power, arguing that, absent the State undertaking the structural changes within its purview that are necessary to support a workably competitive wholesale electricity market, FERC will maintain in place the market power mitigation mechanisms necessary to prevent suppliers from exercising market power. Exh. 217, ORA Report on Path 15, at 10: 1-10. As an initial matter, it is important to recognize that FERC has indicated clearly that it remains committed to the objective of a competitive wholesale electricity market. Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 5: 5-6. In this context, the CA ISO believes that an approach on the part of the CPUC to eschew structural changes that support a workably competitive wholesale electricity market relying instead on FERC to maintain effective market power mitigation measures would be short sighted and highly risky.

In Spring and Summer 2001, after much prodding from California state agencies and the CA ISO, FERC instituted a package of market power mitigation measures that were extended to cover the entire West. See 95 FERC ¶ 61,115 and 95 FERC ¶ 61,418. In adopting the package, FERC stressed that the measures are temporary in nature; are intended to give time to California to put into place structural improvements that will support a workably competitive electricity market; and will expire on September 30, 2002. Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 4: 5-28, at 5:1-4. In an April 26, 2001 order, FERC stated explicitly:

"Reliance on mitigation should not supplant or slow down efforts to add generation as well as to develop more effective market mechanisms, and terminating this mitigation plan in a year will help ensure that all parties work to achieve these goals." 95 FERC ¶ 61,115 (slip op.) at 25.

Since issuing these market power mitigation orders, FERC has continued to insist that the current market power mitigation measures will expire on September 30, 2002. For example, on December 19, 2001, FERC once again denied requests for rehearing of the September 30, 2002 sunset date for the mitigation measures, 97 FERC ¶ 61,275 (slip op.) at 61-62; Exh. 220, and ordered the CA ISO to incorporate the September 30, 2002 termination date into its Tariff, 97 FERC ¶ 61,293 (slip op.) at 23; Exh. 220. In addition, as recently as mid-February, FERC Chairman Wood indicated that it was his position that the mitigation measures should terminate on September 30, 2002, since the State had been given ample opportunity during the years in which the measures were in effect, to reduce both the infrastructure and market design deficiencies that exist in California. Tr. (Greenleaf) at 565: 2-11.

Thus, a rejection of the Path 15 upgrade relying on FERC to indefinitely maintain effective market power mitigation measures would be contrary to FERC's explicitly articulated intent. Such a strategy would be highly risky and could in one year cost consumers far more than upgrading Path 15.

In its market redesign program, the CA ISO intends to propose a further package of market power mitigation measures to FERC to take the place of the current broad West-wide program. Exh. 228, Third Quarterly Report of the CA ISO, at 98. However, there is significant resistance on the part of other entities in the West, to an on-going West-wide mitigation approach, and FERC, which has been pressured by these entities, has indicated clearly that the current West-wide approach will terminate on September 30, 2002. Tr. (Casey) at 775: 1-28; at 776: 1-24. If after September 30, 2002, mitigation measures are once more limited to California,

their efficacy will likely diminish significantly. Id. California depends on the broader regional market for imports, and without a West-wide mitigation program in-state suppliers can sell to the Southwest or Northwest to avoid mitigation measures that are in effect only in California. Id. Thus, an effective market power mitigation approach requires a program that is West-wide in its application, but West-wide application is unlikely to survive beyond September 30, 2002. Tr. (Casey) at 775: 1-28; at 776: 1-24.

In sum, it is highly risky to rely on existing market power mitigation measures to prevent the exercise of market power by suppliers in the long-term. FERC has clearly and repeatedly indicated that the current package of measures will expire on September 30, 2002, and has been subject to significant pressure by Western entities to eliminate the current West-wide approach. While even the current package of measures has not fully eliminated the ability of suppliers to exercise market power, see Exh. 228, Third Quarterly Report of the CA ISO, at 26-30, a California only approach would be much less effective. Tr. (Casey) at 775: 1-28; at 776: 1-24.

B. Action Should be Pursued to Address All the Key Structural Deficiencies That Permit Suppliers to Exercise Market Power.

The CA ISO supports aggressive action to redress all the key structural deficiencies that allow suppliers to exercise market power. The record is clear that while a Path 15 upgrade would significantly reduce that ability, it will not on its own eliminate the ability of suppliers to exercise market power. There is no evidence to suggest that other strategies would be completely successful individually either, particularly as each of the alternative strategies to reduce market power has its own benefit-cost limitations. Rather, the record illustrates how actions taken in concert can support and complement each other. Thus, to correct the significant market power problems that have existed in California over the past few years, a concerted, multi-pronged effort is required.

The key components of a multi-pronged effort to reduce the ability of suppliers to exercise market power, in addition to providing for adequate transmission infrastructure, were listed by CA ISO witness Casey at various times during the hearings. They include: increasing demand responsiveness, improving supply adequacy (keeping in mind the concentration of market share by particular suppliers); and encouraging utilities to enter into long-term contracts for supply. Tr. (Casey) at 581: 19-28; at 582: 1-14; at 769: 12-28; at 770: 1-17.

The CA ISO's Department of Market Analysis (DMA) study of the benefits of a Path 15 upgrade, "Potential Economic Benefits to California Load from Expanding Path 15 -- Year 2005 Prospect", Exh. 201, Attachment 4 (DMA study) indicates the level of market power that would exist with and without the Path 15 upgrade in a number of scenarios. The DMA study shows that while upgrading Path 15 will significantly reduce the ability of suppliers to exercise market power in all cases, the upgrade will not, in itself, entirely eliminate the ability of suppliers to exercise market power in any case. Exh. 201, Attachment 4, Tables 3 and 4, lines A and B; Tr. (Casey) at 769: 1-8. There is no evidence to suggest that the other measures available to address structural deficiencies in the market would, in isolation, cost-effectively eliminate all ability on the part of suppliers to exercise market power.

In fact, although there is no discussion of the relative benefits and costs of alternatives to reduce supplier market power[2], it is reasonable to conclude that each alternative has associated costs that would limit the extent to which it could be used cost-effectively to mitigate the ability of suppliers to exercise market power. For example, demand responsiveness has costs associated with the customer behavioral changes that are required; long-term contracting can have costs

[2] In its responses to CA ISO data requests, ORA witness Scott Logan listed ongoing FERC mitigation measures as low cost alternatives to transmission upgrades to curb market power, although he could not quantify the costs of these "low cost measures". Exh. 218, ORA Responses to CA ISO DR, Answer to Question 14. The risks associated with relying on FERC action are described in section II, A above. Mr. Logan did not address any other "low cost" measures.

both in terms of the risk of locking in a price that over time proves to be uneconomical and locking in the effect of market power if these effects are prevalent at the time the contracts are signed; new generation development also has associated costs, particularly if significant excess capacity is required to mitigate the market power of a supplier that already controls a significant proportion of available supplies.

While the record does not explore the benefit-cost of alternatives, it does illustrate how, undertaken in concert, these measures can be more successful than in individual application. For example, CA ISO witness Casey explained that long-term contracts ultimately reduce the ability and incentive of suppliers to exercise market power by reducing 1) the level of load exposed to short term price volatility and 2) the benefit suppliers obtain from exercising market power. Tr. (Casey) at 769: 24-28; at 770: 1-17. However, Mr. Casey explained that, if conditions prevail in which suppliers know they can exercise market power, and believe they will continue to be able to do so, these circumstances will be factored into the negotiations for the long-term contracts, and the long-term contract prices will themselves reflect market power. Tr. (Casey) at 598: 16-28; at 599: 1-2. If suppliers are aware however, that steps are underway that will reduce their ability to exercise market power, such as the expansion of transmission capacity or programs to increase demand response, these circumstances too will be factored in the contract negotiations and the contracts are more likely to reflect reasonable prices. Thus, different strategies applied in concert can have a complementary effect.

In sum, there is no evidence in the record that any of the alternatives available to address structural deficiencies that permit suppliers to exercise market power would be cost-effective to the exclusion of other strategies in single-handedly creating a workably competitive market in California. Rather, a concerted, multi-pronged effort that includes upgrading Path 15 should be pursued.

C. The Path 15 Upgrade Would Address a Constraint in the Backbone Transmission System with Statewide and Regional Significance.

In the face of the extreme distortions in the California and Western electricity markets during the past year and a half, policy-makers at the state and federal level have begun to focus on the need for a robust transmission system to support a reliable, workably competitive wholesale electricity market. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 18: 1-15. For example, the California Legislature in AB 970 charged the CPUC and the CA ISO to work together to "[i]dentify and undertake those actions necessary to reduce or remove constraints on the state's existing electrical transmission ... system" and to "give first priority to those geographical regions where congestion reduces or impedes electrical transmission and supply." California Public Utilities Code §399.15. To support these objectives, the CA ISO has begun developing a vision of an adequate 500 kV backbone transmission system. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 19: 10-11. Upgrading Path 15 is one of the highest priority projects in that plan. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 19: 11-12.

Path 15 does now, and has historically, played a major role in the seasonal exchanges that take place between Northern and Southern California and California and the Pacific Northwest. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 3: 9-10. The Path supports seasonal exchanges of thermal and hydro generation, with power typically flowing from south to north during late summer through winter periods to enable northern hydroelectric resources to restock and conserve their water suppliers for critical peak periods. Exh. 200, Testimony of Perez, Greenleaf and Casey, 3: 10-16. Because Path 15 has often been limited by its operating capacity, it has been, since the commencement of CA ISO operations, an Inter-Zonal Interface, and hence transmission customers that submit schedules over Path 15 must pay a usage charge to use the scarce capacity available. Exh. 200, Testimony of Perez, Greenleaf and Casey, 3: 17-24. Thus,

Path 15 can be considered a significant backbone transmission constraint that can affect the operation of the competitive market on a statewide and even regional basis. See Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 5: 18-19.

The CA ISO recognizes that in addressing market power concerns, a balance must be struck between regulatory intervention and adding transmission infrastructure, as it would be uneconomic to upgrade the transmission system to address all cases and all levels of market power. Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 5: 18-19. For example, the CA ISO has supported limited, on-going mechanisms such as the Reliability Must Run contracts to address transmission constraints that are local in nature. Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 5: 10-17. In the case of a significant regional constraint such as Path 15, however, broad on-going, market-wide mitigation would be necessary to address market power concerns. Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 5: 22-25. Therefore, in the case of a significant statewide and regional constraint like Path 15, an upgrade that would significantly reduce market power concerns is more prudent than relying on on-going and prevalent regulatory intervention in the market. Id.

Moreover, and for similar reasons, in the case of transmission projects of the magnitude, and state and regional significance of the Path 15 upgrade, relying on generation alternatives can be problematic. As Mr. Greenleaf explained on the stand, it is difficult to rely on generation alternatives because there is no assurance that they will be there when needed, since the availability of generation depends on market signals. Tr. (Greenleaf) at 608: 23-26. Further, a "tremendous" level of generation is required to obtain the benefits of a Path 15 upgrade. This is particularly true as to market power mitigation benefits since a limited amount of generation built as an "alternative" to the upgrade could be in a position to exercise market power. Tr. (Greenleaf) at 608: 15-28; at 609: 1-12.

In sum, upgrading Path 15 to reduce market power is appropriate because Path 15 is a significant state and regional path for important electricity transfers, and the alternative would be ongoing broad and pervasive regulatory intervention in the market.

III. UPGRADING PATH 15 IS VERY COST EFFECTIVE IN THE MOST LIKELY SCENARIO AND PROVIDES INSURANCE AGAINST THE CONSEQUENCES OF EXTREME SCENARIOS.

The record in this proceeding demonstrates that the Path 15 upgrade is very cost effective in the most likely scenario; the costs of the upgrade could be recovered within four years. Even deducting 25% from the projected benefits to account for substantial uncertainty associated with a number of key factors and biases in the analysis, the project costs can be recovered within four years. The record demonstrates that the upgrade also provides substantial insurance against the risk of potentially very high costs in less likely scenarios, while negative risks are capped at the relatively modest project cost of $300 million. In these circumstances, the CA ISO considers that the record provides strong justification for going forward with the upgrade.

A. The Methodology Used by the CA ISO to Assess the Benefits of Upgrading Path 15 While Innovative is Well Founded and Adequately Validated.

The CA ISO's evaluation of the benefits of upgrading Path 15 in terms of reducing market power impacts is one of the first of its kind performed in the United States. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 17: 16-18. Accordingly, there were questions during the hearings about the legitimacy of the methodology used. The CA ISO is currently engaged in an exercise with the California investor-owned utilities and relevant California state agencies to develop a methodology to assess the economic benefits of proposed transmission upgrades. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 17: 20-22. This methodology was not developed in time for the CA ISO to perform its Path 15 assessment. Nonetheless, the

CA ISO considers that the methodology used to assess the market power benefits of a Path 15 upgrade is sound, founded on a solid theoretical basis, and validated by the statistical relationship demonstrated between the key parameters, and its ability to accurately predict prices, except in highly anomalous situations.

The methodology employed to assess the market power benefits of the Path 15 upgrade uses the relationship between a Residual Supply Index (RSI), system load and Lerner Indices to predict the percent that suppliers will be able to increase prices above the prices that would exist in a competitive market. Exh. 201, Testimony of Casey and Willis, at 9: 16-26; Tr. (Casey) at 676-680. The methodology is based on a supply function equilibrium methodology used by Green and Newbery in an economic model of the England and Wales electricity market, and confirmed in competitive electricity markets around the world, including the New England electricity market, and the PJM electricity market. Exh. 206, CA ISO Response to Energy Division DR, Answer to Question 1. The methodology has been applied to the California electricity markets by key academics such as Borenstein, Bushnell, Wolak, Joskow and Kahn. Id. A similar but simplified methodology, the Supply Margin Assessment methodology, was proposed by FERC in a November 20, 2001 Order. Id.

A regression analysis undertaken for the DMA study established that there is a strong statistical relationship between Lerner Indices, RSIs and CA ISO system loads. Exh. 221, Further Testimony of Keith Casey, at 2: 10-16. The results of this regression analysis are set forth in Table 2, Exh. 201, Attachment 4. These results indicate that there is a statistically significant relationship between RSI, system load and Lerner Indices in all four periods studied, with the one exception: system loads were not a statistically significant explanatory variable for Lerner Indices during the Off Peak Season Peak hours. Tr. (Casey) at 908: 27-28; at 909: 1-9.

At the request of the judge, the CA ISO undertook an exercise to further validate the statistical relationship between Lerner Indices, RSIs and CA ISO system loads. Using data from two different time periods, the CA ISO used the Lerner Index regression estimates established in the DMA study to estimate prices, and compared the estimated prices to the actual prices. The two time periods used were the year 2001, and the period between November 1998 to October 1999. This exercise further validated the methodology used by the CA ISO to estimate the market power benefits from upgrading Path 15.

In the validation exercise using the period between November 1998 to October 1999, predicted prices closely matched actual prices for 9 of the 12 months assessed (November 1998, January 1999 through July 1999 and September 1999). Exh. 221, Further Testimony of Keith Casey, at 7: Figure 3. Only in three months, December 1998, August 1999 and October 1999, were results appreciably different. Id. Given the numerous factors that could be expected to affect the ability of suppliers to exercise market power, in addition to RSIs and system load, these results provide a very strong validation of the methodology used by the CA ISO to assess the market power benefits of upgrading Path 15. Exh. 221, Further Testimony of Keith Casey, at 7: 18-21.

In the validation exercise using year 2001 data, there was far more variation between predicted prices and actual prices than in the exercise for the November 1998 to October 1999 period. This result, however, is not surprising. Even before undertaking the validation exercise requested by the judge, CA ISO witness Casey testified that he had concerns about using 2001 data for validation purposes due to a number of anomalous conditions that year. Tr. (Casey) at 623: 17-28; at 624: 1-7. Mr. Casey's concerns were borne out by the 2001 analysis, since the actual price-cost markups significantly exceeded predicted price-cost markups January through May, and were significantly below predicted price-cost markups in June through August. Exh.

221, Further Testimony of Keith Casey, at 4: Figure 1. However, there are a number of clearly identifiable factors that help explain the anomalies.

First, the market was in disarray in the first half of 2001 because the California Power Exchange ceased operations, it took some time for the California Energy Resource Scheduler (CERS), the scheduler for CDWR, to assume the role of purchasing on behalf of two of California's utilities, and natural gas prices were unprecedently high. Exh. 221, Further Testimony of Keith Casey, at 5: 19-25; Tr. (Casey) at 940-943. None of these conditions is likely to recur. Id. In the second half of the year, price-cost markups lower than expected can be explained by sales of excess power on the part of CERS and the imposition of an increasingly more stringent package of market power mitigation measures by FERC starting in April. Exh. 221, Further Testimony of Keith Casey, at 5: 26-28; at 6: 1-21.

In sum, the methodology used by the CA ISO to assess the benefits of upgrading Path 15, while innovative, has a sound theoretical basis and has significant empirical validation.

B. Upgrading Path 15 is Highly Cost-Effective in the Most Likely Scenario.

The judge asked the parties to indicate in their briefs a reasonable range of benefits that would result from the Path 15 upgrade. The CA ISO considers that using reasonable assumptions, the estimated $300 million cost of the Path 15 upgrade could be easily be recovered in four years. Based on the record that has been developed, the CA ISO's initial view of how some of the key factors should be assessed has changed; resulting in even higher benefits from the upgrade than initially projected. In light of the record, the CA ISO considers that there is a very strong basis for going forward with the upgrade.

The CA ISO's assessment of each of the key assumptions is discussed below. The discussion below also addresses biases that result in under and over estimates of the benefits. Because there are biases that operate in either direction, and because it is not possible to quantify

these biases, the CA ISO believes that it is appropriate to rely on the outcome of the assessment without a quantitative modification. Instead to acknowledge that there are significant uncertainties associated with the key parameters, and biases that have not been quantified, the CA ISO believes it is appropriate to consider a range of benefits applying a plus or minus 25% factor to the results in the most likely scenario. The results of this exercise are set forth in section III, B, 6, below.

1. It is reasonable to assume that a one in ten year drought will continue to take place every one in ten years.

The CA ISO considers that it is reasonable to assume that a one in ten year drought will continue to occur at least once every ten years. See Exh. 200, Testimony of Perez, Greenleaf and Casey, at 9: 9-14. There does not appear to be much controversy about this assumption. Rather, there were questions about the CA ISO's four year scenario that assumed one drought year and three normal years. This scenario was premised on the fact that droughts do occur in California with a one-in-ten years frequency, and that accordingly a drought could easily occur within a few years of a Path 15 upgrade. In any event, the revised benefits figures indicate that the upgrade could pay for itself within four normal hydro years.

Further, it is worth pointing out, as Mr. Casey testified, that a one-in-ten year drought probability does not preclude a sequence of more than one dry year in a row, even though a drought of equal severity two years in a row would not be expected. Tr. (Casey) at 561: 9-18. Since benefits are particularly high in drought years, the upgrade could also serve as insurance against the ability of suppliers to exercise a high degree of market power in consecutive dry years.

2. The CA ISO's initial assumption of continued unavailability in 2005 of 50% of ETC capacity reserved in 2000is unduly pessimistic; 29% is a more reasonable number.

The record indicates that it is unduly pessimistic to assume, as the CA ISO did in its opening testimony, that in 2005, 50% of the capacity subject to ETCs that was reserved in 2000 would remain unavailable and unused in the forward electricity markets in 2005. Instead, the CA ISO concedes that 29% would be a better number. The rationale and effect of this change follow.

Before describing CA ISO's view about appropriate ETC assumptions, it is important to describe ETCs, the problems they create for the CA ISO, why these are likely to persist in 2005, and how the CA ISO modeled ETC capacity in the DMA study. ETCs are transmission contracts between certain parties and Participating Transmission Owners (Participating TOs) that were in effect at the time the CA ISO began operations on March 31, 1998. FERC required the CA ISO and Participating TOs to honor these contracts. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 9: 17-19.

Many of these contracts allow ETC rights-holders to schedule up to 20 minutes prior to transaction times. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 9: 18-20; Exh. 206, CA ISO's Response to Energy Division DR, Answer to Question 8. (In fact, all ETC contracts over Path 15 allow for scheduling up to 20 minutes before the Trading hour. Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 1; Tr. (Le Vine) at 848: 20-28; at 849: 5.) In contrast, the CA ISO scheduling procedures require that Market Participants submit their schedules in the Day-Ahead scheduling process, by 10:00 A.M. on the day before the operating day, or in the Hour-Ahead scheduling process, two hours prior to the operating hour. Exh. 206, CA ISO Response to Energy Division DR, Answer to Question 8. The CA ISO's congestion management process calculates applicable congestion charges that are

applied in the Day-Ahead process, with an ability on the part of Market Participants to amend their schedules to avoid Congestion Charges, and in the Hour-Ahead process, with no further ability to make scheduling adjustments. Exh. 206, CA ISO Response to Energy Division DR, Answer to Question 8.

Generally, to reconcile these timelines, the CA ISO reserves the capacity subject to ETCs for ETC rights-holders in the Day-Ahead and Hour-Ahead scheduling processes. See Exh. 206, CA ISO Response to Energy Division DR, Answer to Question 8. However, in the case of Path 15, the process is a little bit different. Pursuant to a February 1999 agreement negotiated in response to a FERC Order, in the case of ETC capacity over Path 15, PG&E conveys to the CA ISO an ETC reservation amount by 8:30 A.M. of each weekday prior to the start of a Trading Day, which can be revised by PG&E by 4:30 PM of the weekday prior to the start of the Trading Day. Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 1. PG&E determines the reservation amount based on prescheduled amounts submitted to PG&E by some of the ETC rights-holders, on the previous day's schedules and on PG&E's view of the capacity that will be used by such ETC rights-holders, with an additional amount of margin to ensure that sufficient capacity is available to ETC rights-holder that wish to modify their pre-scheduled use. Id. (While the reservation amount can be decreased, it cannot be increased. Tr. (Casey) at 21-24. Thus, in the case of Path 15, the amount of ETC capacity that the CA ISO makes unavailable in the Day-Ahead and Hour-Ahead scheduling processes is not the full ETC capacity but rather the ETC capacity reserved by PG&E and Southern California Edison. Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 1.

As a result of the scheduling times-lines described above, there has been ETC capacity that was set aside for use by the ETC rights-holder that is never used in the forward electricity

markets, even by the ETC rights-holders. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 9: 27-28; at 10: 1-2.

Whether it is reasonable to assume that ETC capacity will continue to be underutilized in forward electricity markets in 2005 is the seminal question in determining appropriate ETC capacity assumptions for purposes of analyzing the Path 15 upgrade. The CA ISO considers that it is reasonable to make this assumption. As noted in the CA ISO rebuttal testimony, the CA ISO has advocated and will continue to advocate before FERC for adoption of a mechanism to make available in the forward electricity markets unused transmission capacity subject to ETCs; however, notwithstanding these efforts, the ETC problem has persisted since startup. Exh. 202, Rebuttal Testimony of Perez, Greenleaf and Casey, at 7: 23-28. Mr. Greenleaf explained that ETC rights-holders consider their flexible scheduling rights to have considerable value. Tr. (Greenleaf) at 642: 9-11. Further, Mr. Greenleaf testified that the New York Independent System Operator, which also faces ETC related problems, has not been able to resolve the problems even after five years of negotiations and litigation. Tr. (Greenleaf) at 668: 18-24. In fact, after initially minimizing the ETC problem, even ORA witness Scott Logan recognized that there are more ETC arrangements than he suspected when writing his testimony, and that it is difficult for the CA ISO to, as Mr. Logan characterized it, do battle with the ETC rights-holders. Tr. (Logan) at 831: 5-20.

In sum, the record supports the view that it would be optimistic to merely assume that there will be no further ETC related issues in 2005, particularly as two ETC contracts associated with Path 15, the CDWR Comprehensive Agreement and TANC SOTP Contract, extend beyond 2005 and well into the future. Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 1. The question then becomes what is a reasonable assumption about the magnitude of the underutilized ETC problem in 2005.

In the DMA study, the CA ISO provided two possible "bookends" for the ETC capacity use spectrum:

- in cases labeled "including ETC" in tables 3 and 4 of Exh. 201, Attachment 4, the CA ISO assumed that all ETC capacity would be available to the market during all time frames in 2005 (TTC scenario). Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 2.
- in cases labeled "excluding ETC" in tables 3 and 4 of Exh. 201, Attachment 4, the CA ISO assumed, on an hour-by-hour basis, that all of the ETC capacity that was reserved by PG&E and SCE in 2000 would be unavailable and unused in the forward electricity markets in 2005 (ATC scenario). Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 2.

In its opening testimony, the CA ISO acknowledged that some ETCs that were in effect in 2000 will expire by 2005, and that it is reasonable to assume that some reserved ETC capacity will be used. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 11: 20-28; at 12: 1-2. Accordingly, the CA ISO argued that a reasonable assumption would be that 50% of the ETC capacity reserved in 2000 would remain unavailable and unused in 2005. As the record on ETCs has developed, the CA ISO considers the 50% figure to be unduly elevated and that 29% is a better founded number[3].

In 2000, the following ETCs over Path 15 were in effect: CDWR EHV Agreement (300 MW); SCE CCPIA (580 MWs sold to other entities); CDWR Comprehensive Agreement (810 MW); TANC SOTP (300 MW); SMUD TRS (400MW); TID IA (32MW), for a total of

---

[3] Technically, in estimating the ATC and TTC values used in the Year 2005 analysis, DMA conducted 100 Monte Carlo draws for each hour from ATC and TTC data for Path 15 for each corresponding month in 2000. Exh. 201, Attachment 4 at 13. However, given that these are random draws, the average ETC usage assumed unavailable for use in the forward markets in 2005 should approximate the average hourly amount of ETC reserved in 2000.

2422MW. Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 1. In 2000, 45.7% of total ETC capacity over Path 15 was reserved. Thus, on average, the DMA study assumed that 1100 MW of ETC capacity was unavailable for use in the forward markets in 2005[4].

The SMUD TRS contract expired on December 31, 2000. Id. The CDWR EHV Agreement will expire on December 31, 2004. Thus, neither of these agreements which were in place in 2000 will be in place in 2005 and this change should affect the analysis. Moreover, the SCE CCPIA will expire on July, 31, 2007, and although according to PG&E responses to CA ISO queries there is some uncertainty as to whether it can be renewed. The CA ISO concedes that it would be appropriate, absent further information, to assume that the contract will not be in effect after 2007. This results in the elimination in the next five to six years of 1,280 MW of capacity subject to ETC from 2000, leaving a total ETC figure of 1142MW by 2008.

It was established during the hearings that, since final scheduled usage numbers are unavailable, the best information on ETC capacity that is reserved but not used, would be the ETC reservation minus the ETC capacity scheduled in the Hour-Ahead scheduling process. Tr. (Casey) at 955-956. On Path 15, 45.7% of the total ETC capacity was reserved in the Hour-Ahead market in 2000. Of that 45.7% reserved, 38.3% was scheduled, which means that 61.7% of amount reserved was unscheduled in the Hour-Ahead market. Thus, a good proxy for the amount of unavailable and unused ETC in 2005 would be 1142 MW (total remaining ETC capacity over Path 15 in 2005) x 28.2% (45.7%*61.7%), or 322 MW. 322 MW is approximately 29% of 1100 MW, the approximate average hourly amount of ETC capacity that was assumed to be unavailable and unused in 2005 in the DMA study. Thus, extrapolating within the bookends established in the DMA study, the CA ISO would add to the excluding ETC cases, 29% times

[4] 45.7% * 2422 = 1106.9.

the difference between the excluding ETC and including ETC cases to arrive at a reasonable benefits number.

In sum, the problems associated with capacity subject to ETC are real and should not be assumed away. While the CA ISO has tried and will continue to try to reduce the level of capacity that remains unused in forward electricity markets due to ETCs, the record demonstrates that merely assuming that the problem will cease to exist in 2005 would be overly optimistic. However, the CA ISO acknowledges that based on the record, a more appropriate estimate of the ETC capacity that will remain unused in 2005 is 29% of the amount reserved in 2000.

3. A mid-point between the medium and low new generation scenarios is most reasonable.

In its written testimony, the CA ISO testified that a medium new generation scenario was the most reasonable. However, since that time, conditions in the market have changed and a significant number of projects have been cancelled or put on hold. Tr. (Casey) at 655: 7-28; at 656: 1-4; Exh. 228, Third Quarterly Report of the CA ISO, at 62-68. Accordingly, the CA ISO now believes that a medium to low new generation scenario is the most reasonable.

As noted by Mr. Casey, the DMA study is most sensitive to assumptions about new generation development North of Path 15. Tr. (Casey) at 656: 16-22. Accordingly, the assumptions about new generation development North of Path 15 will be discussed first. Three scenarios were modeled for generation North of Path 15: Scenario 1, Scenario 2 and Scenario 3. In Scenario 1 (the medium scenario), the CA ISO assumed that all generating plants approved by the California Energy Commission (CEC) or with approval from the CEC pending, and 291 MW of peakers would be built. In Scenario 2 (the low scenario), the CA ISO assumed that all generating plants approved by the CEC and 291 MW of peakers would be built. In Scenario 3 (the high scenario) the CA ISO assumed that all approved, pending, and announced plants would be built, as well as 291 MW of peakers. Exh. 201, Attachment 3, at 21-22.

In their opening testimony, the CA ISO policy witnesses testified that it is plausible to assume a medium new generation build out in California. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 7: 21-22. On the stand, however, Mr. Casey noted that since the opening testimony was written, his opinion about the most reasonable assumption for new generation had changed. Mr. Casey noted that changes in the economic conditions in California coupled with anecdotal information raise questions about the extent to which pending and announced projects would be built. Mr. Casey noted that he now believes a more plausible scenario to be somewhere between the medium and low generation scenarios. Tr. (Casey) at 727: 4-11.

Mr. Casey's opinion is supported by information in the March 26, 2002, Third Quarterly Report of the CA ISO, Exh. 228. That report indicates that 1) the probability of completing new generation projects that are scheduled to be online by August 2002 and that are only in the permitting or study stage is uncertain; and 2) developers have already cancelled approximately half of the generating projects expected to go online between August and December 2002. Exh. 228, Third Quarterly Report of the CA ISO, at 64-5. The report further indicates as considerations for the likelihood of future new generation development that: 1) in the wake of the Enron bankruptcy, many companies have recently chosen to either delay, place on hold, or withdraw projects to try to strengthen balance sheets and reduce debt loads; 2) credit-rating down-grades due to the Enron bankruptcy, weakening energy prices and poor economic conditions could result in higher costs of capital for new generation and reduce the ability of developers to obtain financing; 3) higher California costs associated with the production of energy could also negatively impact investment decisions. Exh. 228, Third Quarterly Report of the CA ISO, at 66-7. Finally, the report notes that 1,773 MW of planned generation was

cancelled in 2001, and 2,888 MW of planned generation has been cancelled so far in 2002. Exh. 228, Third Quarterly Report of the CA ISO, at 68.

In light of these factors, the CA ISO considers that a more likely scenario for new generation in Northern California, is 100% of approved projects, 50% of projects with approval pending and 100% of peaker projects. Since Scenario 1 includes all approved, pending and peaker projects, and Scenario 2 includes all approved and peaker projects, the mid-point between Scenarios 1 and 2 is a reasonable approximation of the revised most plausible new generation scenario. Conversely, the high generation Scenario 3 has become even less likely.

These conclusions are supported by the response of ORA witness Logan to the CA ISO data requests. Asked about the new generating plants ORA expected to be on line in 2005 North of Path 15, Mr. Logan listed four new plants providing a total additional 2970 MW of capacity. Exh. 218, ORA Responses to CA ISO DR, Answer to Question 3. The 2,970 MW figure is still significantly below the LOW generation figure assumed in the DMA study of 4,590 MWs. Further Mr. Logan acknowledged that "what was termed the 'low' generation scenario in September may become the 'medium' scenario in at the present time". Exh. 218, ORA Responses to CA ISO DR, Answer to Question 17.

The same analysis applies in the case of Southern California new generation development. However, in terms of considering the impact of revised new generation assumptions on the likelihood of particular scenarios assessed in the DMA study, it is important to recognize two distinctions with regards to new generation assumptions for North of Path 15 and South of Path 15. First, with regards to new generation South of Path 15, Scenario 1 is the medium generation scenario; Scenario 2 is the high generation scenario and Scenario 3 is the low generation scenario. Exh. 201, Attachment 3, at 22. Second, the South of Path 15 new generation figures are lower than those used in scenarios developed to assess the reliability need

for a second link between Southern California and the Southwest (SWPL scenarios), and could thus be argued to somewhat lower than appropriate. See Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 4.

These two factors combined indicate the following. Scenario 3, the low generation South of Path 15 scenario, may include unduly pessimistic assumptions about new generation development South of Path 15; however Scenario 3 is unlikely in any event because it likely overstates potential new generation development North of Path 15. Scenario 1 (the low SP 15 scenario) is lower than the SWPL middle or low scenarios, and thus arguably unduly low; whereas Scenario 2 (the high SP 15 scenario) is somewhat, but not much, above the SWPL middle scenario, and thus likely overly high. However, the mid-point between Scenarios 1 and 2 would reflect a generation scenario for South of Path 15 between 4,813 MW and 6894 MW ≈ 5,853; this mid-point is not substantially different from the mid-point between the medium and low cases in the SWPL scenarios, 5766 MW (the mid-point between 6487 MW and 5045 MW). Thus, a mid-point between Scenario 1 and Scenario 2 would incorporate a realistic assessment of likely new generation South of Path 15.

As Mr. Casey testified, assumptions about new generation South of Path 15 affect the DMA study only to the extent they affect the competitive base-line price to which any price-cost markup would be applied. Thus, even a significant error in assumptions about new generation South of Path 15 would likely have a small impact on the market power benefits analysis. Tr. (Casey) at 727: 14-28; at 728: 1. Nonetheless, if South of Path 15 generation is underestimated, the result is that market power benefits may be somewhat overstated, although the impact should be small. Id. The converse is also true. Thus, Scenario 1, which likely understates SP 15 new generation, likely overstates market power benefits, and Scenario 2, which likely overstates new

generation, likely slightly understates market power benefits. In a case taking the mid-point benefits between these cases, these errors would likely cancel out.

In sum, because new information suggests that projections of new generation should be reduced downward, the CA ISO considers the more reasonable assumption to be that new generation development would be a mid-point between Scenarios 1 and 2 for both North of Path 15 and South of Path 15.

4. The record supports a scenario in which half the State long term contracts are considered to reduce the impacts of supplier market power.

The CA ISO has acknowledged that to the extent that utility customer load can be met through existing long-term power contracts, this load would be shielded from the effects of supplier market power. Accordingly, in assessing the market power benefits of a Path 15 upgrade, the CA ISO assessed two set of cases, one which assumed the ongoing existence of the long term contracts negotiated by CDWR on behalf of utility customers, and one that excluded these contracts.

In its opening testimony, the CA ISO listed as the most reasonable case, one in which 100% of the existing CDWR contracts remain in effect in 2005; and assumed that all load backed by such contracts would be shielded from the exercise of market power. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 7. Given further development of the record, the CA ISO now believes that it is unduly optimistic to consider that 100% of the load that can be met by existing CDWR contracts will be shielded from supplier market power, since over 50% of these contracts are not firm in 2005. Accordingly, the CA ISO considers a more plausible scenario to be one in which only 50% of the load subject to CDWR long-term contracts is shielded from the ability of suppliers to exercise market power.

In its opening testimony, the CA ISO acknowledged that it is plausible to assume that 100% of the CDWR contracts would remain in effect and mitigate the ability of suppliers to exercise market power in 2005. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 7: 19-27. The CA ISO also noted that the Path 15 upgrade would provide insurance against the possibility that some of the existing CDWR contracts could be modified or cancelled prior to 2005, since in such scenarios the upgrade benefits would be even more substantial. Exh. 200, Testimony of Perez, Greenleaf and Casey, at 12: 16-21. The CA ISO noted that if the contract prices are deemed to be higher than prevailing market prices over the next few years, the State may seek to terminate or renegotiate the terms of the contracts. Id.

As the record has developed, the CA ISO considers that assuming that 100% of load covered by the CDWR contracts would be shielded from the impacts of supplier market power is unduly optimistic. During the hearings, Mr. Casey explained that non-firm contracts provide less protection against the exercise of market power than firm contracts. Tr. (Casey) at 912: 2-21. The shortcomings of non-firm, non-dispatchable long-term contracts in shielding load from supplier market power are discussed in further detail in the CA ISO's March 26, 2002 quarterly report, Exh. 228, Third Quarterly Report of the CA ISO, at 90-96. Nonetheless, when it calculated the MW of load subject to CDWR contracts in 2005, for cases "Including Long-term Contracts" (Table 4 of Exh. 201, Attachment 4), the CA ISO included all CDWR contracts, including firm and non-firm contracts. This can be confirmed by reviewing Exh. 225, Summary of Long-term Contracts in 2002, which sets forth the MWs subject to CDWR contracts that were assumed DMA study, and comparing the numbers to Exh. 228, Third Quarterly Report of the CA ISO, at 92, figure 24, which sets forth year by year the MW of CDWR contracts through 2014.

Exh. 228, Third Quarterly Report of the CA ISO, at 92, Figure 24 illustrates that in 2005, at least 50% of the MWs available from the CDWR contracts are both non-firm and non-

dispatchable, and a further 10% of the MWs available from the CDWR contracts are non-firm but dispatchable. Exh. 228, Third Quarterly Report of the CA ISO, at 92, Figure 24. Since non-firm contracts do not provide the same level of protection against the exercise of market power as firm contracts, the CA ISO considers that it is more reasonable to assume that loads equal to 50% of the MWs available under the CDWR contracts would be shielded from market power impacts in 2005.

Suggestions have been made that the existing long-term contract coverage for load could be improved in the CPUC's proceeding relating to utility procurement. Some may argue that the DMA study overstates the harm from the exercise of market power to load (and hence the benefits of the upgrade) because it neglects to account for subsequent long-term contracts between utilities and suppliers. Nonetheless, the CA ISO considers it appropriate in determining the impacts of market power in 2005, to consider the long-term contracts that are in effect now. This is because although long-term contracts reduce the load subject to further market power once they are in place, they can themselves reflect market power if suppliers can predict that they will be able to exert market power in the future. Tr. (Casey) at 598: 20-28.

This effect can be reduced if utilities negotiate long-term contracts several years in advance, particularly to the extent suppliers are uncertain about the extent to which they will be able to exercise market power in the future. Tr. (Casey) at 600: 6-23. Thus a comprehensive strategy to address market power concerns can be more effective than relying on one strategy alone. As discussed earlier, utilities may be able to obtain better long-term contracts, if suppliers understand that Path 15 will be upgraded and their ability to exercise market power in the future reduced.

In sum, the CA ISO considers that in assessing the market power benefits of a Path 15 upgrade it is most plausible to assume that 50% of the load covered by CDWR contracts will be shielded from the exercise of market power in 2005.

5. Additional biases in the analysis do not justify a departure from the study results.

In determining a reasonable range of benefits from the Path 15 upgrade it is appropriate to review factors in the analysis that may have biased the results to either overstate or understate the benefits of the upgrade. The CA ISO acknowledges that there are such factors and will discuss each such factor below. However, for a number of reasons, the CA ISO considers that these factors do not provide an adequate basis to revise the estimate of benefits. First, as will be illustrated below, there are factors that would result in both slight over and understatements of the Path 15 upgrade benefits. Second, there is little quantitative information on the record as to the potential magnitude of the biases relative to each other.

Without more precise information, there is no basis to conclude that the estimated benefits numbers should be revised. Rather, a plus or minus 25% factor can be applied to the benefits in the most likely scenario to capture the uncertainty associated with key parameters and the lack of quantitative information on the biases discussed below. The CA ISO notes moreover, that significant additional work to quantify the likely impact of the bias factors is unlikely to be productive, since further precision on some of these more subtle influences would likely be outweighed by the level of uncertainty associated with the key factors that have been quantified.

a. Factors that result in an understatement of upgrade benefits in the DMA study.

- The DMA study does not quantify or consider the market power benefits South of Path 15. As Mr. Casey testified, the addition of transfer capability reduces the ability of suppliers North and South of Path 15 to exercise market power. Tr. (Casey) at 662: 5-12; Exh. 221, Further Testimony of Keith Casey, at 8-10. Nonetheless, the DMA study does not quantify

the benefits to load in Southern California from the reduction in the ability of suppliers to exercise market power South of Path 15. Tr. (Casey) at 662: 5-12. This omission results in an understatement of the Path 15 upgrade benefits to California consumers.

- The DMA study assumed that the proportion of operational transfer capability (OTC) to total transfer capability (TTC) that was in place in 2000 would be the same in the case of an upgrade to Path 15 in 2005. That is, in 2005 there would be the same level of OTC as in 2000 for the existing transfer capability, and the proportion of OTC to TTC for added transfer capability from the Path 15 upgrade would be the same as the proportion of OTC to TTC in 2000. Exh. 222, March 21 Response of CA ISO to Certain Questions of Judge Gottstein, Answer to Question 2. This assumption is incorrect.

  There is a simultaneous interaction between Path 15 and West of Borah that is expressed in a nomogram. Exh. 214, PG&E's Opening Testimony, Tab 6 at 4. The current interaction is described in the nomograms that comprise Exhibit 226. On the stand, Mr. Perez explained that a Path 15 upgrade would affect the simultaneous interaction between Path 15 and West of Borah and decrease the extent to which Path 15 transfer capability would have to be reduced due to interactions with West of Borah. Tr. (Perez) at 884: 12-20. Thus, OTC would increase proportional to TTC after a Path 15 upgrade, and hence the benefits of the upgrade would be greater than those reported in the DMA study.

  It is also true that the proportion of OTC to TTC could increase in 2005 over what occurred in 2000, if there are upgrades made West of Borah that affect the Path 15-West of Borah nomograms. Tr. (Perez) at 884:12-20. However, neither the CA ISO nor other California entities can control whether and if upgrades West of Borah will in fact be made. Moreover, as discussed earlier, an upgrade to Path 15 would not single-handedly eliminate the effects of market power in any of the cases studied. Thus, even if an upgrade West of

Borah assists in mitigating the ability of suppliers to exercise market power in California, there would likely still be significant additional benefits from undertaking a Path 15 upgrade that increases the transfer capability over the Path a full 1500MW.

- The DMA study assumed that a Path 15 upgrade would add 1400 MW of transfer capability to the Path. In fact, however, the upgrade is projected by PG&E to add 1500 MW of transfer capability to Path 15. As a result the DMA study understates the benefits of the upgrade, although Mr. Casey testified that, given the limited nature of the difference, he would not expect a significant difference in results. Tr. (Casey) at 590: 1-8.
- The DMA study calculated RSI values in a period in which price caps were in effect. Tr. (Casey) at 924: 8-28; at 925: 1-7; at 928-930. Accordingly, the price-cost markups were likely less than they would be in an unconstrained market. Id. To the extent that price caps are no longer in effect in 2005, the DMA study would likely understate the level of price-cost markups that could be expected and hence the benefits from a Path 15 upgrade.

b. Factors that result in an overstatement of upgrade benefits in the DMA study.

- The DMA study assumed that there would always be sufficient excess power South of Path 15 to fill the capacity of Path 15 and contest the ability of suppliers North of Path 15 to exercise market power. Tr. (Casey) at 656: 26-28; at 657: 1-26. To the extent that there are hours in which there is insufficient capacity South of Path 15 to contest the ability of suppliers North of Path 15 to exercise market power, the DMA study overstates the benefits of the upgrade. Id. This is particularly so if suppliers North of Path 15 are aware of the deficiency.
- The DMA study did not assess the extent to which a supplier's existing and future long-term contracts might reduce its incentive to exercise market power. Tr. (Casey) at 909-910. Incorporating this assessment is a significant undertaking that could not be performed given

resource constraints. Tr. (Casey) at 914-917. To properly asses the degree of change in 2005, it would be necessary to determine a likely difference between the level of long term contracts in effect in 2000, the effects of which are captured in the DMA study, and the level of long-term contracts likely to be in effect in 2005. Id. To the extent that the level of supply capacity of pivotal suppliers subject to long-term contracts in 2005 is higher than the level in 2000, the DMA study would overstate the benefits of a Path 15 upgrade. The CA ISO believes that this bias could be balanced by biases that understate the benefits as described above.

c. Other uncertainty factors.

- The DMA study did not assume that there would be more demand response in 2005 than that in place in 2000. The study does incorporate the level of demand response in place in 2000. Tr. (Casey) at 700-703. It is difficult to determine whether this factor results in an overstatement or an understatement of benefits since there is little information on the extent of demand response that will be in place in 2005. Mr. Casey testified that efforts to include additional demand response in 2001 in the California electricity markets has met with limited success. Tr. (Casey) at 701-702. Nonetheless, the CA ISO certainly hopes that progress can be made going forward. In any event, as discussed above, the CA ISO supports a comprehensive strategy to address structural factors that provide the basis for supplier market power since there is no evidence that any one strategy alone will cost-effectively and adequately mitigate the ability of suppliers to exercise market power.
- There is evidence in the record that the level of congestion over Path 15 was less in 2001 than in 2000. Exh.215, Late-Filed Graph of Path 15 Congestion. However, Mr. Casey testified that this reduction was due to the fact that CDWR, which stepped in to buy on behalf of customers in 2001, had the ability to buy power after the close of the Hour-Ahead markets

and undertook this responsibility in a manner that would reduce congestion over Path 15. Tr. (Casey) at 572: 11-21. This situation is no longer available to any entity, Tr. (Casey) at 575: 5-18. Thus, there is no reason to suspect that the anomalous congestion pattern of 2001 will be present in 2005. Moreover, the fact that CDWR was able to manage its purchases to avoid congestion over Path 15, does not mean that there were no costs associated with the limited transfer capability over Path 15 in 2001. This is because, to prevent causing congestion over Path 15, CDWR may have had to buy more expensive contracts or energy North of Path 15 since buying less expensive power South of Path 15 would not have been feasible without causing congestion. Tr. (Casey) at 575: 22-28; at 576: 1-10; and at 577: 14-23. Thus, the CA ISO does not consider that there is evidence to support a conclusion that there will be less congestion, and less costs from congestion over Path 15 in 2005 than in 2000.

- The study undertaken of historic costs associated with congestion over Path 15 indicated possible costs of up to $220 million, a figure substantially higher than a study undertaken by FERC and reported in IEEE. Exh. 213, IEEE Spectrum Article, Feb. 2002. Questions may arise about whether these inconsistent results should undermine confidence in the DMA study. However, the historic study, Exh. 203, was an independent exercise from the DMA study, and the CA ISO did not rely significantly on the historic study in determining on a prospective basis the market power benefits of upgrading Path 15. Tr. (Casey) at 613: 24-28; at 614: 1-3. In fact, the historic study did not include any consideration of the costs associated with Path 15 congestion due to the ability of suppliers to exercise market power. Tr. (Casey) at 615: 16-28; at 616: 1-8.

Moreover, the CA ISO historic study and the FERC study were designed to measure separate aspects of the impacts of Path 15 congestion. The CA ISO historic study attempted

to assess the cost impact of congestion to load. Tr. Tr. (Treinen) at 961: 18-21. The FERC study assessed the difference between what the load paid and what generators got paid, or the flow times the congestion price. Tr. (Treinen) at 962: 21-27. In other words, the FERC study ignores a transfer of wealth from load to generators from congestion, which is reflected in a study that quantifies, as the CA ISO's study did, the cost impact to load.

In sum, there are biases that both understate and overstate the benefits of a Path 15 upgrade in the DMA study. Without further information about the quantitative impact of these biases, the CA ISO considers that they are best addressed by applying a plus or minus 25% factor to the results in the most plausible scenario to develop a reasonable range of probable benefits.

6. The revised estimate of benefits.

This section sets forth an analysis of how the updated CA ISO assumptions impact a conclusion that the upgrade would pay for itself in one drought and three normal years. As will be demonstrated below, the CA ISO considers that this conclusion still holds, even applying a plus or minus 25% factor to account for uncertainties. In fact, the revisions further highlight the benefits of the upgrade.

As described above, based on new information and the record developed, the CA ISO considers that the following are the most reasonable assumptions as to the key factors underlying the DMA study:

- a one-in-ten drought hydro scenario remains appropriate, supporting consideration of a case that includes one drought hydro year and three normal years;
- a mid-point generation scenario between Scenarios 1 and 2 is appropriate since it reflects an increased uncertainty as to the construction of new generators that have not been permitted by the CEC and corrects for any overly conservative estimates of new generation in Southern California;

- an assumption that 29% of the ETC capacity reserved in 2000 will remain unavailable and unused in the forward electricity markets in 2005 is more accurate than a 50% assumption, given the historic scheduling pattern and the contracts that expire by 2008;
- an assumption that 50% of the load backed by CDWR long-term contracts will be shielded from the exercise of market power is more realistic than a 100% assumption, given that more than half the CDWR contracts in effect in 2005 are non-firm in nature.

Attachment A sets forth the calculations for determining the upgrade benefits given these revised assumptions. As a result of these assumptions, projected benefits from the upgrade in a normal year would be $104 M, whereas projected benefits from the upgrade in a drought year would be $305M. As demonstrated in the chart below, with these revised numbers, the upgrade would easily pay for itself in one drought and three normal years, and would in fact pay for itself within four normal years, even applying a 25% plus or minus factor.

Four Year Benefits Assessment[5]

	Simple Figures	+ 25%	- 25%
Normal (A)	$ 104 M	$130	$78
Drought (B)	$ 305	$381	$228
3 (A) + 1 (B)	$ 617	$771	$462
4 (A)	$ 416	$520	$312

[5] The CA ISO selected the four year benefits assessment approach, because it highlights the fact that the upgrade could easily pay for itself within a relatively small number of years and because it avoids the need to extrapolate assumptions made for 2005 for an extensive number of years. Tr. (Casey) at 680: 12-19. Nonetheless, if the CPUC believes that one annualized number is better than the four year analysis approach, the numbers can easily be converted to an annualized number that reflects a one-in-ten year drought hydro scenario as follows: [.9 X $104M] + [.1 X $305 M] = $124M. Applying a 25% plus or minus factor to account for uncertainty results in an annual benefits range of $93 to $155 M.

7. The upgrade provides cost effective insurance against unlikely but costly scenarios.

A final and important consideration in the evaluation of the Path 15 upgrade is the relative risks to consumers should the upgrade be undertaken or not. This consideration is compelling. Consumers will bear high risks if the project does not proceed and relatively contained risks should the upgrade be constructed. This risk assessment clearly provides substantial additional justification for upgrading Path 15.

In the most pessimistic of scenarios evaluated in the DMA study, the benefits of upgrading Path 15 (and conversely the cost to consumers of not upgrading Path 15) exceed one billion dollars in a single year. Exh. 201, Testimony of Casey and Willis, Attachment 4 at 19, Table 3. Even adjusting this figure for a more realistic view with regards to ETC (29% of the ETC reserved in 2000 will be unavailable and unused in the electricity forward markets in 2005), the benefits are close to twice the cost of the project upgrade ($600 million)[6]. Accordingly, the risks to consumers from failing to upgrade the Path are significant. Conversely, even in the most optimistic scenarios evaluated in the DMA study, upgrading Path 15 has some benefits. Since the cost of upgrading the Path is limited to $300 million, the total risk to consumers from upgrading Path 15 is less than $300 million. The asymmetry of risks is a further substantial argument in favor of the Path 15 upgrade.[7]

---

[6] The figure is calculated as follows: [29% of ($1,304.07 M - $289.19 M)] + $289.19 M = $ 583 M. The figures 1,304.07 and 289.19 are from Exh. 201, Attachment 4, at 19 Table 3, Bad Hydro Year scenarios.

[7] It is worth noting moreover, that in the event that the most optimistic scenarios do come to pass, and the direct economic benefits of the Path 15 upgrade are substantially less than those currently projected, the Path 15 upgrade could nonetheless be used to provide important reliability benefits. As set forth in PG&E's Plan of Service for the Path 15 upgrade, the current 3900 MW Path rating has been made possible by the establishment of remedial action schemes (RAS). Exh. 214, Opening Testimony of Pacific Gas and Electric Company, Tab 6, at 7. These RAS schemes are summarized in Table 4 of the Plan of Service and were discussed by Mr. Morris on the stand. Exh. 214, Opening Testimony of Pacific Gas and Electric Company, Tab 6 at 7-8. The RAS summaries and Mr. Morris' testimony demonstrate that the 3900 MW path rating is maintained by allowing for the possibility of substantial generation and load outages in the event of highly unlikely but possible events. The Path 15 upgrade would provide an additional 1500 MW of added transfer capability with somewhat increased levels of RAS. Exh. 213, Opening Testimony of Pacific Gas and Electric Company, Tab 6 at 7-8. However, if the additional capacity is not entirely required to reduce the ability of suppliers to exercise market power, it may be possible to use the upgrade to reduce the likelihood of operating the RAS; thus improving reliability.

In sum, the substantial risk associated with not upgrading Path 15 coupled with a contained risk in the case of going forward argue strongly for proceeding with the upgrade.

IV. CONCLUSION.

The record strongly supports proceeding with the Path 15 upgrade. By reducing the ability of suppliers to exercise market power, the upgrade would pay for itself within four years in the most likely scenarios. Moreover, the upgrade provides a cost-effective hedge against significant consumer harm in less likely but still plausible worst-case scenarios.

Respectfully submitted this 10th of April, 2002 by:

Jeanne M. Solé
Regulatory Counsel
California Independent System Operator
151 Blue Ravine Road
Folsom, CA 95630
(916) 608-7144

Attachment 3

Letter Agreement Between the Path 15 Upgrade Participants of PG&E, Trans-Elect, and WAPA

[Letter Head]

April 29, 2002

Honorable Magalie Roman Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: Trans-Elect, Inc., Pacific Gas and Electric Company and Western Area Power Administration: Path 15 Upgrade, Docket ER02-____.

Dear Secretary Salas:

Enclosed for filing with the Commission are an original and 6 copies of the Letter Agreement between the Path 15 Upgrade Participants. Please time stamp the two additional copies and return them to me in the self-addressed stamped envelope.

Western Area Power Administration ("Western") on behalf of Trans-Elect, Inc. ("Trans-Elect"), Pacific Gas and Electric Company ("PG&E"), and itself, together called the Path 15 Upgrade Participants, submits this limited filing pursuant to Section 205 of the Federal Power Act and Section 35.13 of the Commission's Rules and Regulations. While Western is not subject to Section 205 of the Federal Power Act, the other Path 15 Upgrade Participants are. To ensure that the project is completed in a timely manner and consistent with the Commission order in the *Removing Obstacles to Increase Electrical Generation and Natural Gas*

Supply in the Western United States, Docket EL01-47-000, (“*Removing Obstacles Order*”), as Project Manager, Western is filing this Letter Agreement. This Letter Agreement is an essential ingredient in the Path 15 Upgrades Project. It identifies the parties’ obligations, expected rate methodologies and a blueprint for continued progress. As a result, the project Participants ask the Commission to expeditiously accept the Letter Agreement and approve the rate treatments contained in Section 7 so the project can be completed within its schedule timelines.

I. BACKGROUND OF THE FILING

As highlighted in the President’s National Energy Policy Report, this nation faces serious challenges in assuring that adequate and reliable supplies of power are available to meet the needs of consumers. Among the most difficult obstacles to overcome is the lack of construction of new transmission to deliver electricity to load. Stimulation of investment in new high voltage transmission infrastructure is critical to our country’s future economic health.

Path 15 is a transmission path located in northern California. The majority of the flow of power from southern California to northern California and to the

Pacific Northwest flows through Path 15.[1] Path 15 is constrained since there are just two, rather than three, 500-kV transmission lines in this area.[2] It is one of the most highly used and constrained transmission paths in the nation. The Path 15 transmission bottleneck has plagued California for over a decade, and contributed to blackouts.[3] The operating limits of Path 15 limit power flows in the area and the California Independent System Operator ("CAISO") has defined it as an Inter-Zonal Interface in its Congestion Management process.[4] Congestion on Path 15 has caused higher energy prices. This has undermined the reliability of the CAISO controlled grid.[5]

In light of the reluctance in recent years of the capital markets to fund needed electrical transmission, the Secretary of Energy was particularly pleased to announce last October the formation of a public/private consortium that was willing to fund the $300 million project. The creation of this group promises to alleviate a major constrained path in California, and to set a national example of how a public/private group could finance needed transmission investment.

---

[1] CAISO Path 15 Expansion Benefit Study at 6 (9/26/01).
[2] Path 15 Upgrade Phase 1 Comprehensive Progress Report at 3 (9/18/01).
[3] Path 15 Upgrade Phase 1 Comprehensive Report at 4.
[4] CAISO Path 15 Expansion Benefit Study at 6.
[5] *Id*. at 7.

Congress authorized the construction of the California Oregon Transmission Project ("COTP")[6], including the Los Banos-Gates Transmission Line, in the 1985 Energy and Water Development Appropriations Act.[7] Congress authorized Western to participate with non-federal entities in the construction and operations of COTP. In 1992, the participants completed the construction of the COTP. While the Act authorized construction of the Los Banos-Gates Transmission Line, the COTP participants chose not to construct it at that time.

On May 17, 2001, the National Energy Policy Report recommended that President Bush direct the Secretary of Energy to authorize Western to explore relieving the Path 15 bottleneck through transmission expansion in California. Since the COTP legislation provides Western with the authority to construct the Los Banos-Gates Transmission Line, Western looked at that option to relieve the Path 15 bottleneck.

Through an open and public process, Western solicited interest from non-federal entities that desired to participate in the construction and ownership of Path 15

---

[6] The COTP is one of the three 500-kV transmission lines between the Pacific Northwest and California.

[7] P.L. No. 98-360, 98 Stat. 403, 416 (1984), *see, also*, Supplemental Appropriations for Fiscal Year 1985, P.L. No. 99-88, 99 Stat. 293,321 (1985).

upgrades from Los Banos to Gates. On June 13, 2001, Western published a notice in the Federal Register requesting statements of interest.[8] Through this process, Trans-Elect and PG&E were among those Western selected to participate in the construction of the Los Banos-Gates Transmission Line -- the Path 15 upgrade.

This Letter Agreement is an essential ingredient in the Path 15 Upgrades Project. It identifies the parties' obligations and expected rate methodologies. In its order in *Removing Obstacles Order* the Commission noted that:

> The problems that California and the West have been experiencing with regard to electricity supply/demand imbalances and high market prices result from transmission constraints, generation inadequacy and inadequate demand-side responses.[9]

The Commission took actions where it would have the greatest impact – fostering the installation of critical transmission investment.[10] As part of that docket, the Commission identified and approved several incentives to promote the construction of much needed transmission lines.[11] These incentives include higher rates of return

[8] 66 Fed. Reg. 31909 (6/13/01).
[9] 94 FERC ¶ 61,255 at 61,968 (March 14, 2001)
[10] *Id.* at 61,969.
[11] *Id*; *see, also, Removing Obstacles to Increased Electric Generation and Natural Gas Supply in the Western United States, Further Order on Removing Obstacles to Increased Energy Supply and Reduced Demand in the Wesern United States and Dismissing Petition fo* Rehearing, Docket EL01-47-000 and EL01-47-001, (*"Further Removing Obstacles Order"),* 95 FERC ¶ 61,255 at 61,761 (May 16, 2001).

for new projects and accelerated depreciation.[12] The order expires on April 30, 2002.[13]

In testimony provided by the CAISO before the California Public Utilities Commission related to Path 15, the CAISO provided the following summary of electric system operation in California related to Path 15:

> . . .Historically, Path 15 has played a major role in the seasonal exchanges that take place between Northern and Southern California, and California and the Pacific Northwest. The majority of thermal generation in California is located in Southern California (and the desert Southwest), whereas the majority of the hydroelectric facilities are located in Northern California and Pacific Northwest. In large part driven by this geographic dispersion of thermal and hydroelectric generation, power typically flows from the south to north over Path 15 during winter off-peak hours, in part to enable northern hydroelectric resources to restock and conserve their water supplies, thus making those critical resources available during critical peak periods. This historical use of resources (and Path 15) has held constant even after the implementation of restructuring in California. However, these historical seasonal exchanges and resultant power flows over Path 15 have often been limited by the operating capacity of Path 15. Thus, since the CAISO began operations, Path 15 has been defined as an Inter-Zonal Interface (connecting the Congestion Zone north of Path 15 -- NP15 -- with the Congestion Zones south of Path 15 -- SP 15 and ZP26) in the CA ISO's Congestion Management process. As a result of this designation, transmission customers (Scheduling Coordinators) that submit schedules that use Path 15 must pay a charge (Usage Charge) for the right to use the constrained or "scarce" transmission capacity available on Path 15.[14]

---

[12] *Further Removing Obstacles Order* at 61,764.
[13] *Id.* at 61,761.
[14] Opening Brief of California Independent System Operator on Path 15 Benefits at 9, *Order Instituting Investigation into Implementation of*

With respect to the benefits associated with an upgrade to Path 15, the CAISO concluded in its testimony:

> . . .a $300 million project to add 1500 MW of transfer capability at Path 15 is economically justified to reduce the risk of high prices associated primarily with the exercise of market power by strategically located generation and the existence of drought hydro conditions but also other factors such as the risk of a low level of new generation development in Northern California. An examination of historical Congestion costs and studies undertaken by the CAISO show that 1) between September 1, 1999 and December 31, 2000, congestion on Path 15 cost California electricity consumers up to $221.7 million; and 2) using reasonable assumptions, the $300 million cost of upgrading Path 15 could potentially be recovered within one drought year, plus three normal years. Further, upgrading Path 15 is consistent with a broader strategy to put into place a robust high-voltage transmission system that supports cost-effective and reliable electric service in California and a broader and deeper regional electricity market.[15]

The Path 15 upgrade removes one of largest and most notorious obstacles to increased electrical generation in the Western United States. In 2001, Path 15 led to two days of rotating outages of firm customer load and numerous days of threatened outages.[16] The CAISO's study indicates that potentially there is a significant economic benefit

---

AB 970 Regarding the Identification of Electric Transmission and Distribution Constraints, Actions to Resolve Those Constraints, and Related Matters Affecting the Reliability of Electric Supply, I.00-11-001 and Conditional Application of Pacific Gas and Electric Company (U39 E) for a Certificate of Public Convenience and Necessity Authorizing Construction of Los Banos-Gates 500 kV Transmission Project, A.01-42-012 ("Path 15 CPUC Proceeding"). (4/10/2002).

[15] Testimony of Armando Perez, Stephen Thomas Greenleaf and Keith Casey on Behalf of the California System Operator, at 2, *Path 15 CPUC Proceeding.* (9/25/01).

for upgrading Path 15 in terms of mitigation of costs.[17] By providing additional import capability into northern California, the Path 15 upgrade promotes a more competitive electric market. The Path 15 Upgrade falls directly on point with the intent of the Commission's order in *Removing Obstacles Order*.

In making this filing, the Participants are using the guidance of the *Removing Obstacles Order.* However, while Path 15 upgrades relieve one of the most notorious transmission constraints in the United States, its scheduled completion date falls outside the dates contained in the order. This has raised significant concerns among the financial institutions that are participating in the construction. As a result, as part of this application, the Participants are seeking acceptance of Letter Agreement and approval of the rate methodology contained therein and developed using the principles and guidelines of the *Removing Obstacles Order*.

Specifically, the *Removing Obstacles Order* indicates the Commission's desire "to elicit whatever additional electric supply there is from existing resources and, equally important, to identify and work constructively on medium and longer term solutions, including new

[16] Path 15 Upgrade Phase 1 Comprehensive Report at 4.

infrastructure that can help avert future recurrences of the current electric supply shortage in the West."[18] The Path 15 Upgrades increase the capability from 3900 MW to 5400 MW for north-bound power deliveries. This increase of 1500 MW alone would have eliminated the power supply shortages faced in Northern California when local generation was inadequate.

The *Removing Obstacles Order* further provides that "the Commission reiterates the urgent need to do what it can to alleviate the ongoing energy situation facing the West and generally affirms its approach in providing incentives and removing obstacles to increased energy supply in the West."[19] The specific rate incentives are key to the increased interest in development of the Path 15 Upgrades and in bringing new parties who are willing to provide funding, where others have been unable to do so. The Commission also determined "that the accelerated depreciation proposal is warranted as an incentive to expedite transmission enhancements as it would provide improved cash flow and better position utilities for

---

[17] Potential Economic Benefit to the Expansion of Path 15 9/24/01 at 1.
[18] *Removing Obstacles Order*, 94 FERC ¶ 61,272 at 61,967 (March 14, 2001).
[19] *Further Removing Obstacles Order*, 95 FERC ¶ 61,225, 61,761 (May 16, 2001).

longer-term infrastructure investments."[20] This faster return of capital is critical as PG&E, in particular, faces a large number of needed projects, in addition to the Path 15 Upgrades.

Continued adherence and observation of these *Removing Obstacles Order* principles provides much needed certainty to both the ratepayers and the financial institutions. The Letter Agreement also provides a commitment by the parties to resolve many of the issues that are currently plaguing the efficient operation of the transmission system in California. As part of this Letter Agreement, the Participants propose to turn over the operational control of the entire upgrade to the CAISO. The Participants also provide a commitment to turn over operational control of the upgrades to an RTO approved by the Commission.

This Letter Agreement is critical to this public/private consortium for financing the needed investment to alleviate a major constrained transmission path. The Participants requests acceptance of the Letter Agreement and approval of the rate methodologies contained in Section 7. While the Participants will make additional filings with the Commission, including a full cost of service, these latter filings will reflect the principles

[20] *Id.* at 61,765.

contained in this Letter Agreement.

II. DESCRIPTION OF THE LETTER AGREEMENT

The Letter Agreement identifies the general terms and conditions for the participation in the project.

Section 1 of the Letter Agreement identifies the general terms of the Letter Agreement. It identifies that the Letter Agreement:

- ?? Has been submitted to the Secretary of Energy or his designee for review;
- ?? Will be governed by federal law;
- ?? Is assignable;
- ?? Will be filed with the Commission.

Section 2 of the Letter Agreement provides various definitions.

Section 3 of the Letter Agreement identifies the physical ownership and the transmission entitlements. Western will own the transmission line and associated land. PG&E will own the substations. Trans-Elect, PG&E and Western will all receive an entitlement to the transmission system rights ("TSR"). Initially, Trans-Elect will receive 72%, PG&E will receive 18% and Western will receive 10% of the TSRs. The final allocations will be determined based on the ratio of the contribution made by a Participant to the

project either in terms of funding or actual work performed. In no event will Western's share be less than 10%.

Section 4 delineates the Project Management duties. During the construction of the project, Western will act as the Project Manager and provide services for managing the day-to-day activities of the project until commercial operation. Effective on the date of commercial operation, management of the project will be governed by a management committee.

Section 5 defines the project and the scope. The project is expected to have an incremental rating of 1,500 megawatts (MW) in the South-to-North direction, creating a Path 15 combined system rating of 5400 MW, as determined by Western System Coordinating Council or its successor. The project operation will be coordinated with the existing transmission system and operated in accordance with prudent utility practice as a transmission facility within the CAISO's control area. Scheduling shall be performed in accordance with the appropriate control area scheduling procedures and standards consistent with the North American Electric Reliability Council, and/or business practices and procedures adopted in standard market designs of FERC-certified Regional Transmission Organizations. PG&E and

Trans-Elect will turn over the operational control of their entitlement in the project to the CAISO. Western will turn the operational control of its entitlement provided that the CAISO makes the necessary changes to the CAISO Tariff, operational or other types of agreements that will allow Western to turn over the operational control of such entitlement without turning over control of its existing system. At present a new participant in the CAISO must turn over operational control of all its facilities. The Participants have discussed this with the CAISO and CAISO has indicated that it would accommodate Western's request. However, in the event the CAISO cannot accommodate the request to execute the necessary agreements, Trans-Elect and Western will jointly make an emergency filing in this docket with the Commission requesting an order that requires the CAISO to accept such entitlement. The Letter Agreement contemplates the execution of a future participation agreement ("Participation Agreement"). The Participation Agreement will address the construction of the project and provide the necessary funding and resources to complete the project.

Section 6 identifies the estimated costs and cost sharing responsibilities. The estimated cost of the project is almost $306,000,000. Trans-Elect agrees to pay

the transmission line construction, replacement and maintenance costs. PG&E will be responsible for the construction, replacement and maintenance costs of modifications necessary to its Substations and its existing 230-kV transmission system as required. Western will acquire, at its own or at Trans-Elect's expense, all the land rights. Western will own the transmission line and the land. Western's obligations are contingent on either appropriations from Congress or advance funds provided by Trans-Elect. In the event Congress does not appropriate sufficient funds, Trans-Elect will advance funds to Western pursuant to the Contributed Funds Act

Section 7 establishes the rate-making principles to be used by each jurisdictional Participant. Please see the discussion in the next section: *Description of Rate Methodology Submitted for Approval*, below, for a full description of the rate methodology proposal that the Participants are submitting for approval.

Section 8 of the Letter Agreement deals with governance. The Participants agree to form a Management Committee (comprised of all the Participants) and Transmission Line Construction Committee (comprised of Trans-Elect and Western) for the construction work phase of the project. The specifics for these committees will be

addressed in the Participation Agreement.

Section 9 identifies the subsequent agreements that must be executed. The parties expect to sign a Participation Agreement no later than May 15, 2002 or 10 days after a FERC decision on the Letter Agreement (whichever occurs later). The project is expected to achieve Commercial Operation in late 2004. The Participation Agreement will provide more detail on the governance, ownership percentages, coordinated operations including curtailment sharing with the existing PG&E transmission system, project work products and project scope, and the nature of the ownership rights and responsibilities, including payments for project costs, coordination with CAISO and the mitigation of adverse impacts due to subsequent system modifications. Section 9.4 identifies certain threshold conditions for further participation of some or all Parties before signing a definitive agreement or providing additional funding for the Project. These include a CAISO change in how it handles the flow through of payments to transmission owners. Trans-Elect seeks to bar the CAISO from co-mingling transmission revenues with generation related revenues. This is reflected in Section 9.4.4. of the Letter Agreement.

Section 10 provides for removal and withdrawal. Until the execution of the Participation Agreement, a Party may withdraw by providing 7 day written notice to all parties. Withdrawal after the execution of the Participation Agreement will be more fully discussed in it. Western, at its sole discretion may remove any entity from further participation in the project: (a) if a Participant fails to execute the Participation Agreement within 30 days after the last Condition to Participate occurs; or (b) if a Participant fails to execute the Participation Agreement by September 30, 2002, whichever date occurs first.

Section 11 acknowledges and provides compensation for past performed work.

Section 12 protects confidential information.

Section 13 provides the general intent of the parties.

Section 14 are provisions required by federal law.

III. DESCRIPTION OF RATE METHODOLOGY SUBMITTED FOR APPROVAL

A. Trans-Elect's Rate Methodology

Trans-Elect is an independent, for-profit transmission company that focuses on the acquisition of transmission systems from investor-owned utilities and the development of new transmission lines with the goal of establishing a national network of independent transmission companies

under the Regional Transmission Organizations ("RTOs") envisioned by this Commission. Trans-Elect is in the process of completing the first such acquisition in the United States, that of the Consumers Energy Company's transmission system in Michigan.[21] Trans-Elect is also a general partner in a consortium that formed Alta Link to acquire the transmission system of Trans-Alta in Calgary, Alberta.[22] Both transactions are expected to close this month.

As the only truly independent transmission company in the United States, Trans-Elect has an interest in new transmission lines as well. Trans-Elect was chosen to be a Participant in the Path 15 project by Western. Trans-Elect initially will own through TSRs 72% of the rights to the capacity of the upgrade when built.[23] Trans-Elect is responsible for raising approximately $250 million of equity and debt to fund the project. To obtain sufficient financial support to fund, Trans-Elect must obtain from the Commission sufficient guidance as to the rate principles that will govern this project. Therefore, Trans-Elect respectfully requests the Commission adopt the proposed

[21] *See Trans-Elect, Inc. et al.*, 98 FERC ¶ 61,142 (2002), *order on reh'g*, 98 FERC ¶ 61,368 (March 29, 2002).
[22] On March 28, 2002, Alta Link received regulatory approval from the Alberta Energy and Utilities Board to acquire Trans-Alta's transmission business.

rate principles as set forth below:

1. Trans-Elect's Rate of Return on Equity

Trans-Elect requests that the Commission grant a 13.5% rate of return on equity for its portion of the project. Trans-Elect submits that in light of the risks attendant with the project this proposed rate is relatively modest. A 13.5% return is consistent with what was granted by the Commission in the *Removing Obstacles Order* discussed above.[24]

As stated earlier, the *Removing Obstacles Order* is directly on point and, but for the timing issue, the current project fits under the rationale of that order. While the *Removing Obstacles Order* addressed projects that had short construction/completion schedules, the rationale underlying that order applies equally to projects with longer completion schedules such as the Path 15 Upgrades.

2. Trans-Elect's Target Capital Structure

Trans-Elect requests the Commission permit the use of a target capital structure for the project. This is consistent with the financings done in the gas and oil pipeline industry for new facilities or when capital

[23] *See* Letter Agreement at 3.1.3, 3.2.
[24] 94 FERC ¶ 61,272, at 61,969-70.

structures are aberrational.[25] One of the ways Trans-Elect is able to achieve acceptable returns to obtain private financing is through leverage. Typically, these transactions are optimally leveraged at 20-30 percent equity. However, the equity/debt ratio will vary dramatically over time so that the actual equity component will be in the 40-50 percent range over a period of time. For ratemaking purposes, Trans-Elect requests a 50/50 capital structure as a predicate for obtaining financing in this deal.

Not only does Commission case law support the use of a target or hypothetical capital structure in cases of aberrational capital structures, but also the Commission has permitted their use in circumstances when new gas pipelines are constructed.[26] Trans-Elect would further note that the facilities will be placed in the CAISO and the parties have committed to place all facilities in an RTO when one is available.[27]

3. Trans-Elect's Rate Moratorium

There are a number of pending proposals regarding future rates in the CAISO. However, to allow financing of

[25] *See Alabama-Tennessee Natural Gas Co.*, 38 FERC ¶ 61,251 at 61,849-50 (1987).
[26] *See KansOK Partnership*, 71 FERC ¶ 61,340, at 62,338 (1995); *Wyoming Interstate Co., Ltd.*, 69 FERC ¶ 61,259, at 61,985-89 (1994); *Alabama-Tennessee Natural Gas Co.*, *supra*, 38 FERC at 61,849-50.

the facilities, Trans-Elect requests that it be permitted to establish a fixed revenue requirement and be granted a rate moratorium for 36 months following the effective date of the rates. Such a moratorium may begin after December 31, 2004, and the facilities may not initially be in an RTO, meaning that the moratorium will not be governed by § 35.34(e)(4) of the Commission's Regulations. Nevertheless, Trans-Elect believes FERC should allow such a mechanism to permit financing of the project to go forward. The critical nature of this project, the need for revenue certainty and the difficulty of financing justifies permitting the moratorium to take effect and continue after December 31, 2004 when the project goes into service.[28]

4. Trans-Elect's Depreciation

Trans-Elect would note that it is not seeking accelerated depreciation, despite the fact that the *Removing Obstacles Order*[29] allows companies to file for such a treatment for new facilities. However, Trans-Elect requests that the Commission approve a 30-year depreciable life for the project facilities as being reasonable.

---

[27] Letter Agreement, Section 5.8.
[28] *See Trans-Elect, Inc., et al.*, 98 FERC ¶ 61,142, at 61,423 and 98 FERC ¶ 61,368, slip op. at 7 (Trans-Elect can file and support proposal for rate moratorium to be effective after January 1, 2005 on grounds other than 35.34(e)(4)).
[29] 94 FERC at 61,969-70.

B. PG&E's Rate Methodology Request

PG&E will fully recover all of its reasonably incurred project costs including operation, maintenance, administrative and general, common costs, depreciation, return and taxes that result directly from, or are reasonably allocated to, PG&E's project construction and ongoing ownership costs of the Path 15 facilities owned by PG&E and modified or reinforced under arrangements with the Participants.

PG&E's projects costs will be fully recovered as part of Electric Transmission Network rates pursuant to PG&E's TO Tariff or its successor. The project costs will be fully rolled into network rates and recoverable from all parties who take service under PG&E's TO Tariff, its successor, or any other FERC authorized mechanism related to network service. PG&E will file a comprehensive TO request for the specifics of cost recovery according to the rate provision set forth by PG&E in Section 7.3 of the Letter Agreement.

PG&E requests that FERC allow PG&E to earn a reasonable rate of return on all Path 15 project facilities it owns, plus a 200 basis point incentive for reasons set forth in FERC's *Removing Obstacles Order* as described above.

PG&E requests that FERC allow PG&E to recover, in rates, depreciation expenses for PG&E's Path 15 project facilities it owns based on a 10 year useful life for reasons similar to those put forward in *Removing Obstacles Order.*

PG&E requests that FERC allow a reasonable industry target capital structure as requested by PG&E or ETrans (PG&E's transmission successor organization) in the subsequent TO Tariff rate filing.

C. Western is not seeking rate approval in this filing.

Western is not subject to Section 205 of the Federal Power Act and will set its rates and recover its revenue pursuant to its regulatory authority. Pursuant to the Department of Energy Delegation Order, Western will submit its rates to the Commission for confirmation and approval at a later time.

IV. REQUEST FOR WAIVERS AND EXPEDITED CONSIDERATION

As discussed above, consistent with the *Removing Obstacles Order*, the Participants are making this limited Section 205 filing to commence the project. No cost of service is being provided with this filing because the Letter Agreement deals with the basis for construction of the Path 15 Upgrade Project. Each Participant will provide

their cost of service in a future filing. Therefore, for this filing, the Participants request a waiver of Rule 35.13 as it relates to the provision of cost of service and the associated statements.

For the reasons discussed in the body of this letter, the Participants also ask the Commission to expeditiously accept the Letter Agreement and approve the rate treatments contained in Section 7 so the project can be completed within its schedule timelines.

V. SERVICE

Copies of this filing has been provided to:

- California Public Utilities Commission and
- California Independent System Operator, Inc.

VI. CORRESPONDENCE

Western requests that all correspondence be addressed to:

Koji Kawamura
Western Area Power Admin.
P.O. Box 281213
12155 W. Alameda Pkwy
Lakewood, CO 80228

James D. Keselburg
Regional Manager
Western Area Power Admin.
114 Parkshore Drive
Folsom, CA 95630-4710

Trans-Elect requests that all correspondence be addressed to:

Alan J. Statman
Wright & Talisman PC
1200 G Street, NW
Ste. 600
Washington, DC 20005

Robert L. Mitchell
Executive Vice President
Trans-Elect, Inc.
815 Connecticut Ave., NW
Ste. 1200
Washington, DC 20006

PG&E requests that all correspondence be addressed to:

Kelly Morton
Pacific Gas & Electric Co.
77 Beale Street, B30A
San Francisco, CA 94105

Kevin Dasso
Pacific Gas & Electric Co.
123 Mission St, H12A
San Francisco, CA 94105

VII. ENCLOSURES

1. Attachment A: Letter Agreement
2. Attachment B: Certificate of Service
3. Attachment C: Notice suitable for publication in the Federal Register
4. A 3.5" disk includes all the documents in the RTF, Word, and WordPerfect format (designated RTF, DOC, and WPD, respectively).

Sincerely,

Koji Kawamura
Attorney
Office of General Counsel

Enclosures

TRANS-ELECT, INC., PACIFIC GAS AND ELECTRIC COMPANY AND WESTERN AREA POWER ADMINISTRATION:

PATH 15 UPGRADE PROJECT PARTICIPANT'S LETTER AGREEMENT

EXECUTED:
April 25, 2002

FILED WITH THE FEDERAL ENERGY REGULATORY COMMISSION

Letter Agreement

Path 15 Project

April 25, 2002

Recitals

This Letter Agreement (LA) is made this 25th Day of April 2002, pursuant to the Acts of Congress approved June 17, 1902 (32 Stat. 388), March 4, 1921 (41 Stat. 1404); January 12, 1927 (44 Stat.957), August 4, 1977 (91 Stat. 565), July 16, 1984 (98 Stat. 403, 416), August 15, 1985 (99 Stat. 293, 321), as amended or supplemented. This LA is between the United States of America, acting by and through the Western Area Power Administration (Western), Pacific Gas and Electric Company (PG&E), and Trans-Elect, Inc. (Trans-Elect).

Whereas, the Path 15 Project will promote reliability, enhance power transfer capability between northern and southern California, and promote a more competitive electrical market in the West;

Whereas, the National Energy Policy Report, announced on May 17, 2001, recommended that the President direct the Secretary of Energy to authorize the Administrator of Western to explore relieving the Path 15 bottleneck through transmission expansion;

Whereas, the Secretary of Energy directed the Administrator of Western to complete its planning to relieve Path 15 constraints, and determine whether outside Parties are interested in helping finance and co-own the necessary system additions, including transmission lines;

Whereas, the Path 15 Project is expected to consist of: constructing a new 84-mile, 500-kilovolt (kV) transmission line between the PG&E's Los Banos and Gates

substations in Central California; terminal work at both substations; and certain 230-kV system reinforcements;

Whereas, the estimated cost of the Project is $306 million, with an estimated in-service date of late 2004;

Whereas, the upgrade to Path 15 has been found to be technically feasible;

Whereas, Western, as tasked by the Secretary of Energy, has performed National Environmental Policy Act work related to the project and is serving as the overall Project Manager through energization to ensure the project is constructed;

Whereas, at the direction of the Secretary of Energy, Western issued a *Federal Register* notice on June 13, 2001, and began an open and public process seeking statements of interest from any outside Parties to help finance and co-own a transmission upgrade of Path 15;

Whereas, as a result of a open and public process, the following entities have a role in or are participating in the Project:

Trans-Elect, Inc.;
Pacific Gas & Electric Company; and
Western Area Power Administration.

Whereas, the above named Parties executed a Memorandum of Understanding dated October 16, 2001;

Whereas, the October 16 Memorandum of Understanding required the Participants to develop a Project ownership model that defines the rights of the Participants and the Participants have determined that this model should be submitted to the Federal Energy Regulatory Commission for approval;

Therefore it is hereby agreed that the above-named Participants enter into this LA, thereby fulfilling certain requirements of the October 16, 2001 MOU and representing their intent to continue to participate in the Project and their commitment to jointly develop additional contractual documents that will address responsibilities, financial contributions, ownership rights, and operational details of the Project.

Agreement

1. **General Terms:**

1.1. Submittal to Secretary of Energy: Western is proceeding with Project work contingent upon the Secretary of Energy's approval. Accordingly, once completed, this LA shall be submitted to the Secretary or his authorized designee for final review.

1.2. Participation Costs: Unless agreed to in writing, each Participant shall bear its own costs of participation in the effort to develop additional agreements necessary to move the project forward. Western's participation and obligations are contingent upon contributed funding by Participants, appropriations, and other applicable Federal laws, regulations and policies.

1.3. Governing Law: This LA and any definitive agreements shall be governed by and construed in accordance with the laws of the United States of America, without giving effect to principles of conflicts of law.

1.4. Assignment: The rights under the LA may be assigned with Western's consent, which consent will not be unreasonably withheld. The United States Congress may Assign the rights of the United States without the consent of any Party. PG&E may Assign this LA to any company that may be formed pursuant to PG&E's Plan of Reorganization confirmed by the Bankruptcy Court, without the Parties' prior approval or written consent, provided, that PG&E remains obligated to pay for goods purchased or services rendered up to the effective date of such assignment. PG&E and Trans-Elect may Assign to such Parties' corporate affiliate in which such

Party holds a majority interest or to any Party provided that: (i) the Party and the assignee remain obligated under this LA; (ii) the assignee is creditworthy; (iii) and the assignment otherwise meets the requirements of 41 U.S.C. § 15, as defined in Section 42.1204 of the Federal Acquisition Regulations (2001). Subject to the foregoing, this LA shall be binding upon and inure to the benefit of the successors and assigns of the Parties hereto.

1.5. Filing with FERC: This agreement shall be filed with the Federal Energy Regulatory Commission. In the event the Commission does not accept this LA for filing in its entirety, makes modifications or the Commission does not approve the rate treatments stated in Section 7 of this LA, the Parties will negotiate in good faith to make necessary changes to preserve to the extent practical the original intent of the Parties and to restore the balance of burdens and benefits. In the event a Party cannot agree on making the necessary changes or the Commission does not approve the rate treatments contained in the LA and described in the filing letter, that Party may withdraw or may be removed as provided for in this LA.

2. Definitions:

Whenever used in this Agreement, the following terms, when initially capitalized, shall have the following meanings. The singular of any definition shall include the plural and the plural shall include the singular.

2.1. Assignment or Assign: Any transfer of rights, title, interests, and obligations under this Agreement pertaining to all or any portion of a Participant's share of the Project.

2.2. CAISO: The California Independent System Operator or its successor.

2.3. Entitlement: A Participant's right to use a portion of the Rated Path 15 Upgrade transfer capability, expressed as a percent (%).

2.4. Escrow Account: An escrow account established by Trans-Elect to receive equity and debt for the Path 15 Project. Funds will be transferred from the Escrow Account to the Trust Account for distribution to pay Project costs.

2.5. Participants or Party: Each of Pacific Gas & Electric Company, Trans-Elect and Western Area Power Administration; and each of their successors and assigns.

2.6. Initial Project Work: Project Work that is accomplished using the Initial Funding provided under Section 6.4 of this agreement. It includes but is not limited to design work, material acquisition, additional environmental work, and Land acquisition necessary for the construction of the Los Banos-Gates 500-kV Transmission Line, the 230-kV reinforcements and associated facilities.

2.7. Construction Work: Project work including but not limited to design work, material acquisition, substation modification work, additional environmental work, Land acquisition, construction and any other work necessary for the construction of the Los Banos-Gates 500-kV Transmission Line, the 230-kV reinforcements and associated facilities.

2.8. FERC or Commission: The Federal Energy Regulatory Commission or its successor.

2.9. Land: The land upon which the Transmission Line is constructed.

2.10. NERC: North American Electric Reliability Council or its successor.

2.11. Project: The Path 15 Upgrade Project, a 500-kV Transmission Line which extends between PG&E's Los Banos Substation and PG&E's Gates Substations and associated substation modifications including 230-kV reinforcements.

2.12. Project Manager: That entity responsible for managing the activities of the Project.

2.13. Secretary or Secretary of Energy: The Secretary of the United States Department of Energy or his authorized representative or successor.

2.14. Transmission Line: The physical 500-kv Los Banos-Gates transmission line and structures.

2.15. Transmission System Right (TSR): TSR is an exclusive transmission entitlement on the Project Upgrade portion of the Path 15 (Los Banos to Gates) transmission path in an amount equal to the incremental increase

in the Path 15 (Los Banos to Gates) transmission capability resulting from the Project. The holder of the TSR is entitled to all associated rights, including Firm Transmission Rights (and the revenue derived therefrom) as the term is used by the CAISO Tariff and Protocols. The use of this definition does not limit the Parties in seeking any additional revenues or rights that are authorized by FERC due to a beneficial increase in the CAISO controlled grid capacity resulting from the Path 15 Upgrades.

2.16. Trust Account: A non-interest bearing account established in the United States Treasury by Western, for the Participants, containing funds, prior to obligation of funds by Western, which are immediately available for Project work performed by Western, as provided under this LA.

2.17. WSCC: The Western System Coordinating Council or its successor.

3. Ownership

3.1. Physical ownership:

3.1.1. Western will own the Transmission Line and the Land;

3.1.2. PG&E will own the modifications to its substations and the 230 kV reinforcements (the "Substation");

3.1.3. As described in Section 6, Trans-Elect will provide funding for the development of the Transmission Line and the Land acquisition. Trans-Elect will have Transmission System Rights on Path 15 as more fully described in Section 3.2.

3.2. Entitlement in the Project: As a result of their contribution to the Project each entity will receive an allocation of Entitlement and the associated Transmission System Rights in the Project.

3.2.1. The Initial Allocation: The initial allocations are identified in Exhibit A. PG&E's Initial Allocation is based on the ratio of the estimated costs for PG&E's Substation modifications to the entire Project cost. Trans-Elect's Initial Allocation is based on the ratio of the estimated funds it will provide for the Transmission Line to the entire Project. Western's Initial Allocation is based on the ratio of

all other estimated costs including Land, its role in initiating the public/private partnership development, ownership of the Project and the benefits that Western provides to the entire Project. As described in Section 6, Trans-Elect may provide funds for the acquisition of Land.

3.2.2. Final Allocation: The final allocations will be determined based on the ratio of the contribution made by a Participant to the Project either in terms of funding or actual work performed. In no event will Western's share be less than 10%.

3.2.2.1. In the event Congress appropriates to Western additional funding that exceeds the cost of the Land for this Project, a corresponding change will be made to the Final Allocation. This change will be calculated on a ratio of the amount appropriated in excess of the cost of the Land to the entire Project costs. This will be added to Western's Final Allocation. Corresponding changes will be made to Trans-Elect's Final Allocation.

3.2.2.2. In the event that the above-described Congressional appropriation displaces existing funds that Trans-Elect has provided under the Contributed Funds to Western and such Contributed Funds have been deposited into the federal Trust Account prior to the Congressional appropriation such Contributed Funds shall be returned to Trans-Elect. In addition, for these displaced funds, Trans-Elect's Final Allocation will be credited for generally accepted origination and due diligence costs or actual costs (whichever is lower) and interest as provided under Rule 35.19 of FERC Rules and Regulations. This credit for origination and due diligence costs will be subtracted (as a ratio of the credit over the entire Project costs) from Western's Final Allocation.

4. **Project Management:**

4.1. Project Manager: Western, as designated by the Secretary of Energy, will serve as the overall Project Manager. During the construction of the Project, Western will act as the Project Manager and provide services for managing the day-to-day activities of the Project. Western will oversee the Participants' actives to assure schedules and budgets are met; and that the Participants cooperate to move the Project forward. Western will serve in this role until Commercial Operation. Effective on the date of Commercial Operation, management of the Project will be governed by the Management Committee.

4.2. Western's Role as Project Manager: Western will ensure that the necessary negotiated Project agreements are executed; that the Participants actively participate in the process; and that the Participants cooperate to move the Project forward. Western will also perform lead Federal Agency efforts for the National Environmental Policy Act process, will acquire necessary Land rights for the Project, as well as other functions necessary for the completion of the Project, and will retain at least 10% of the TSRs in the Project.

4.3. Substation Project Management: PG&E will have full responsibility for all aspects of the development of the substations. It has the responsibility to co-ordinate with the Project Manager to complete the substations in accordance with the completion of the Transmission Line.

4.4. Transmission Line Construction Committee. As described in Section 8, a Transmission Line Construction Committee will be formed for the Construction Phase of the Project. The Transmission Line Construction duties will include the development of all bid specifications. Western and Trans-Elect will have an equal role in the Transmission Line Construction Committee. Trans-Elect will serve as chair of the Transmission Line Construction Committee. Trans-Elect will establish an Escrow Account and have responsibility for managing the outflow of funds from the Escrow

Account and making such funds available on a timely basis. The Transmission Line Construction Committee will operate on a required consensus basis, i.e., both Trans-Elect and Western must agree on the decisions.

5. **Project Definition and Scope:**

5.1. Project Capabilities: The Project is expected to have an incremental rating of 1,500 megawatts (MW) in the South-to-North direction, creating a Path 15 combined system rating of 5400 MW, as determined by WSCC. The Participants have yet to determine the incremental increase in the North-to-South Path 15 transfer capability made possible by the Project. The existing system North-to-South Path 15 transfer capability shall be evaluated in order to determine the incremental North-to-South Path 15 transfer capability. All ratings shall be consistent with WSCC standards and shall be confirmed by the appropriate organization. PG&E has completed the WSCC Regional Planning Process on January 18, 2002. PG&E will continue to lead the Participants' activities before the WSCC.

5.2. Project Scope: The total scope of the Project shall be divided into Initial Project Work phase and Construction Work phase, both of which will ultimately lead to the construction and energization of the Los Banos-Gates 500-kV Transmission Line and associated Substation modifications and 230-kV reinforcements for the relief of the existing Path 15 bottleneck. The final scope and design of the Project will be determined through negotiations among the Participants and their evaluation of related power system studies.

5.3. Initial Project Work: Provides for design work, material and equipment acquisition, additional environmental work, and Land acquisitions as funded under this LA.

5.4. Construction Work: Shall be accomplished under a future participation agreement ("Participation Agreement") and shall provide the necessary

funding and resources to complete the Project, including but not limited to the following:

5.4.1. Additional design work not accomplished under Phase I.

5.4.2. Modifications to existing Los Banos and Gates Substations to accommodate the new 500-kV Transmission Line.

5.4.3. Modifications to PG&E's 230-kV system

5.4.4. Additional Communication Facilities.

5.4.5. Construction of a new 84-mile Los Banos-Gates 500-kV Transmission Line.

5.4.6. Construction of necessary system improvements.

5.4.7. Implementing a coordinated operating & interconnection agreement.

5.4.8. Making the necessary Remedial Action Scheme changes.

5.4.9. Any other necessary work to construct the Project and enter it into Commercial Operation.

5.5. Operations: The Project operation will be coordinated with the existing transmission system and operated in accordance with prudent utility practice as a transmission facility within the CAISO's control area, its successor, or the control area certified by NERC. Scheduling shall be performed in accordance with the appropriate control area scheduling procedures and standards consistent with the NERC, and/or business practices and procedures adopted in standard market designs of FERC-certified Regional Transmission Organizations.

5.6. Operation of Project: Operation of the Project shall be in accordance with the Path 15 Upgrade Coordinated Operating and Interconnection Agreement (COIA) and the Participation Agreement to be negotiated among the Parties and any additional agreements that may be necessary.

5.7. Project Transmission Rights: The incremental transmission capability made available by this Project shall be utilized in a manner consistent with FERC regulations. All unused Project transmission capacity shall be made available in a timely manner on a non-discriminatory basis,

consistent with FERC regulations. PG&E and Trans-Elect will turn over the operational control of their Entitlements in the Project to the CAISO. For the Entitlement funded under the Contributed Funds Act, Western will turn the operational control over to the CAISO provided that the CAISO makes the necessary changes to the CAISO Tariff, operational or other types of agreements that will allow Western to turn over the operational control of such Entitlement. In the event the CAISO refuses to execute the necessary agreements, Trans-Elect and Western will make a joint emergency filing with FERC requesting an order that requires the CAISO to accept such Entitlement. Nothing in the LA requires Western to turn over operational control of any other facilities to the CAISO.

5.8. Regional Transmission Organization ("RTO"): In the event FERC approves an RTO that encompasses the geographic confines of Path 15, the Participants commit to turn over the operational control of the Project to the RTO under agreed with terms and conditions negotiated between the Participants and the RTO.

5.9. Environmental work: Western will represent the Project for the National Environmental Policy Act (NEPA) purposes. Western issued a Record of Decision on December 20, 2001.

6. Project Costs

6.1. Cost Sharing: Trans-Elect agrees to pay the Transmission Line construction, replacement and maintenance costs. PG&E will be responsible for the construction, replacement and maintenance costs of modifications necessary to its Substations and its existing 230-kV transmission system as required. Western will acquire, at its own or at Trans-Elect's expense, all the Land rights. Western will own the Transmission Line and the Land. Western's obligations are contingent on either appropriations from Congress or advance funds provided by Trans-Elect. In the event Congress does not appropriate sufficient funds, Trans-Elect will advance funds to Western pursuant to the Contributed Funds Act

as more fully described in Exhibit D. Where funding provided by Trans-Elect to Western, Western assumes no financial risks and Trans-Elect assumes full financial risks.

6.2. Total Project Costs: Estimated to be $306,000,000; see Cost Estimates attached hereto as Exhibit C. Total Project Cost includes reimbursement of certain previous expenses incurred by PG&E and Western on behalf of Parties for Project work subject to approval by the Participants. No other expenses of a Party will be reimbursed by the Project unless agreed to by the Participants.

6.3. Project Costs: Exhibit B describes the estimate of each Participants' project costs, including the previously incurred expenses which are proposed for reimbursement as described in Sections 6.2 and 11.1.

6.4. Initial Funding: The initial funds shall be $1,500,000, to be paid by Trans-Elect. The Initial Funding will be paid into the Trust Account by May 15, 2002. The Participants understand that Western will allocate and obligate the Initial Funds for Project expenses once such funds are deposited into the Trust Account. Should any Participant withdraw or be removed from the Project as provided below that Participant's share of the Initial Funding will not be refunded if the Project continues.

7. Rate Making

7.1. The rates, terms and conditions set by Trans-Elect and PG&E are subject to regulation by FERC. Transmission revenue requirements and rates charged will be just and reasonable, consistent with the public interest, or established under existing law. All the Parties are in support of the ratemaking outlined below and seek FERC approval of these ratemaking principles as part of the approval of this LA.

7.2. Trans-Elect's rates will be based on the following:

7.2.1. A 50/50 debt/equity target capital structure, 13.5% rate of return on equity. Trans-Elect will establish a fixed revenue requirement and a

rate moratorium for 36 months following the effective date of the rates. The revenue requirement will be recoverable from the CAISO.

7.3. PG&E rates will be based on the following:

7.3.1. Full recovery of all of its reasonably incurred Project Costs including Operation, Maintenance, Administrative and General, Common costs, Depreciation, Return and Taxes that result directly from, or are reasonably allocated to, PG&E's Project construction and ongoing ownership costs of the Path 15 facilities owned by PG&E and modified or reinforced under arrangements with the Participants.

7.3.2. PG&E's Projects Costs will be fully recovered as part of Electric Transmission Network rates pursuant to PG&E's TO Tariff or its successor. The Project costs will be fully rolled into network rates and recoverable from all Parties who take service under PG&E's TO Tariff, its successor, or any other FERC authorized mechanism related to network service. PG&E will file a comprehensive TO request for the specifics of cost recovery according to the rate provision set forth by PG&E in this Section 7.3.

7.3.3. FERC will allow PG&E to earn a reasonable rate of return on all Path 15 Project facilities it owns, plus a 200 basis point incentive for reasons set forth in FERC's Western Supply Order (EL01-47-000) and as described in the Filing Letter accompanying this LA.

7.3.4. FERC will allow PG&E to recover, in rates, depreciation expenses for PG&E's Path 15 Project facilities it owns based on a 10 year useful life for reasons similar to those put forward in FERC's Western Supply Order.

7.3.5. FERC will allow a reasonable industry target capital structure as requested by PG&E or E-Trans in the subsequent TO Tariff rate filing.

7.4. Western is not subject to Section 205 of the Federal Power Act and will set its rates and recover its revenue pursuant to its regulatory authority.

Pursuant to the Department of Energy Delegation Order, Western will submit its rates to the Commission for confirmation and approval.

8. Governance

8.1. Establishment of committees: As a means of securing effective managerial and policy direction, cooperation and interchange of information, and of providing consultation on a prompt and orderly basis among the Participants in connection with the various matters which may arise from time to time, a Management Committee (comprised of all the Participants) and Transmission Line Construction Committee (comprised of Trans-Elect and Western) shall be established for the Construction Work phase of the Project. The specific details and duties of the Management Committee and the Transmission Line Construction Committee will be discussed in the initial discussion on the Participation Agreement. The final Participation Agreement will include the specific details and duties of these committees.

9. Subsequent Agreements:

9.1. Nature of Subsequent Agreements: Following the assessment of the Project viability and the response of FERC to this LA, those Participants that wish to proceed shall enter into one or more agreements that provide for funding and construction of the Project. Such subsequent agreements shall incorporate the intent of this LA, except as may be agreed by the Parties to such subsequent agreements or as needed to incorporate the input of agency review. Such subsequent agreements shall provide more detail on the governance, ownership percentages, coordinated operations including curtailment sharing with the existing PG&E transmission system, Project work products and Project scope, and the nature of the ownership rights and responsibilities, including payments for Project costs, coordination with CAISO and the mitigation of adverse impacts due to subsequent system modifications. In order to ensure subsequent agreements are in keeping with the Secretary of Energy's directive and the

Project intent, subsequent agreements are subject to approval by Western as Project Manager.

9.2. Timelines: The Parties expect to sign a Participation Agreement no later than May 15, 2002 or 10 days after a FERC decision on the LA (whichever occurs later). The Project is expected to achieve Commercial Operation in late 2004.

9.3. No Cost Sharing: Each Participant will cover its own labor, travel, and other costs associated with these efforts under this LA.

9.4. Conditions for Further Participation: The threshold conditions for further participation of some or all Parties before signing a definitive agreement or providing additional funding for the Project are:

9.4.1. A FERC order accepting this LA and approving the requested ratemaking principles set forth by the Participants in Section 7 above;

9.4.2. Lender approval/financing for individual Parties;

9.4.3. A letter from the CAISO indicating that they will allow Trans-Elect to execute a Transmission Control Agreement.

9.4.4. CAISO board approval indicating support for all changes to the CAISO's Tariff or an order by the Commission requiring the CAISO to accept the changes requested by Trans-Elect for the revenue recovery mechanism for the Project.

9.5. If Participants do not participate in the formulation of the necessary agreements or execute the agreements in a timely manner, Western as the Project Manager may remove that entity from the Project.

10. Removal and Withdrawal

10.1. Removal of a Party: Western, at its sole discretion may remove any entity from further participation in the Project: (a) if a Participant fails to execute the Participation Agreement within 30 days after the last Condition to Participate occurs; or (b) if a Participant fails to execute the Participation

Agreement by September 30, 2002. Whichever date occurs first provides Western with the sole right to remove:

10.2. Withdrawal of Party: Until the execution of the subsequent agreements discussed above, a Party may withdraw by providing 7 day written notice to all Parties. Withdrawal after the execution of the subsequent agreements will be more fully discussed in those agreements.

10.3. Consequences of Withdrawal or Removal of Party: If a Party desires to withdraw or is removed from the Project before the commencement of construction because of the nonoccurrence of a condition to participation or for any other reason, that Party will give written notice to all Parties of its intent to withdraw. Such Party's rights and obligations (including transmission rights and costs) will be re-allocated at Western's sole discretion. However in no event will it be allocated to PG&E without its consent. Any unallocated funds contributed by a withdrawing or removed Party will be forfeited. The removed or withdrawing Party will have no rights, title or interests in the Project but such Party shall not be held responsible for any damages (whether direct or consequential) related to the Party's withdrawal. Construction will be deemed to have commenced at the time construction contracts are signed with the general contractor or materials are procured to build the Project.

10.4. Should PG&E withdraw or be removed from the Project, the Parties agree that, to the extent the Project proceeds, PG&E's Substation work shall continue as prescribed in PG&E's Commission filed tariffs governing such work. Each Party will cause adjustments to be sought and agreed upon in a timely period so that the original timelines and costs estimates are realized.

10.5. The Participation Agreement (which will be executed at a later date) will govern withdrawal/removal of a Party after the completion of construction. This LA governs withdrawal/removal until and unless it is superceded by another agreement.

11. Project Work in Progress:

11.1. PG&E and Western are performing or have performed work for the benefit of the Project. Western's costs incurred, as the Project Manager, will be credited towards Western's share in the Project. PG&E's costs incurred which are not related to the Substation modifications or the 230-kV line reinforcement but that benefit and are used by the Project shall be reimbursed provided that the Parties approve the reimbursement and the Project proceeds to construction. Such reimbursement shall occur regardless of whether PG&E remains a Project Participant and shall be made no later than commercial operation of the Project.

12. Confidentiality of Market Sensitive Information:

12.1. The Participants shall maintain the confidentiality of all the documents, data, and any other information provided to them by any other Participant containing market sensitive information, where such document, data or other information is designated as confidential by individual Participants and shown to contain market sensitive information. Such information must be clearly marked confidential. Provided, however, that the information will not be held confidential by the receiving Participant if (a) the designating Participant is required to provide such information for public disclosure or (b) the information becomes available to the public on a non-confidential basis (other than from the receiving Party).

12.2. Disclosure of Confidential Information: Notwithstanding the above, if any Party is required by applicable laws or regulations, or in the course of administrative or judicial proceedings, to disclose information that is otherwise required to be maintained in confidence, the Participant may disclose such information; provided, that as soon as such Participant learns of the disclosure requirement and prior to making such disclosure, such Participant shall notify the affected Participant(s) of the requirement and the terms thereof. The affected Participant(s) may, at its sole discretion and own costs, direct any challenge to or defense against the

disclosure requirement and the disclosing Participant shall cooperate with such affected Participant to the maximum extent practicable to minimize the disclosure of the information consistent with applicable law. The disclosing Participant shall cooperate with the affected Participant to obtain proprietary or confidential treatment of confidential information by the person to whom such information is disclosed prior to any such disclosure.

13. Intent of Parties

13.1. This LA constitutes a statement of the present intentions of the Parties and is preliminary and is intended to set forth certain basic terms of understanding reached to date and to serve as a basis for further discussions and negotiations between the Parties with respect to the Project. This LA does not contain all matters upon which agreement must be reached in order for the Project to be completed. Future binding agreement will arise only upon the negotiation, execution and delivery of mutually satisfactory Participation Agreement and the satisfaction of the conditions set forth therein, including the approval of such agreements. If a Participant does not participate in the formulation of the necessary agreements or fails to execute the agreements in a timely manner, Western, at its sole discretion may remove that entity from further participation in the Project.

14. Provisions Required by Law

14.1. Covenant Against Contingent Fees: PG&E and Trans-Elect warrant that no person or selling agency has been employed or retained to solicit or secure the contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by their respective organizations for the purpose of securing business. For breach or violation of this warranty, Western shall have the

right to annul this LA without liability or in its discretion to deduct from the price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

14.2. Contingent Upon Appropriations: Where activities provided for in the LA extend beyond the current fiscal year, continued expenditures by the United States are contingent upon Congress making the necessary appropriations required for the continued performance of the United States obligations under the LA. In case such appropriation is not made, PG&E and Trans-Elect hereby releases the United States from its obligations and from all liability due to the failure of Congress to make such appropriation.

14.3. Contract Work Hours and Safety Standards: The LA, to the extent that it is of a character specified in Section 103 of the Contract Work Hours and Safety Standards Act, 40 U.S.C.A. § 329, is subject to the provisions of the Act, 40 U.S.C.A. §§ 327-333, and to regulations promulgated by the Secretary of Labor pursuant to the Act.

14.4. Equal Opportunity Employment Practices: Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), which provides, among other things, that PG&E and Trans-Elect will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated by reference in the contract.

14.5. Use of Convict Labor: PG&E and Trans-Elect agree not to employ any person undergoing sentence of imprisonment in performing the LA except as provided by 18 U.S.C. 4082 (c) (2) and Executive Order 11755, December 29, 1973.

15. Signature Clause:

The signatories to this LA represent that they are authorized to enter into this LA on behalf of the Party for whom they sign. This LA may be executed in counterparts. This LA is executed this 25th day of April 2002.

PACIFIC GAS & ELECTRIC COMPANY

By:_____

Name:_____

Title:_____

Date:_____

WESTERN AREA POWER ADMINISTRATION

By:_____

Name:_____

Title:_____

Date:_____

TRANS-ELECT

By:_____

Name:_____

Title:_____

Date:_____

Exhibit A:

Initial Allocation of ENTITLEMENT AND TSR

COMPANY	ALLOCATION %	CAPACITY MW[1]
Trans-Elect	72.00%	1080
PG&E	18.00%	270
Western	10.00%	150
Total	100.00%	1500

[1]Based on an estimate of 1500 MW.

Executed: April 25, 2002

Exhibit B:

Summary Estimate of Participant's Project Costs

COMPANY	DOLLAR INVESTMENT $ Millions	FACILITY OWNERSHIP %	PHYSICAL OWNERSHIP OF FACILITY
Trans-Elect	$249.60		
PG&E	$55.07	100.0%	Substations
Western	$1.33	100.0%	Land/T-line
Total	$306.00		

Exhibit C:

Project Cost Estimates

Exhibit D:

Payment Instructions

1. Pursuant to the Contributed Funds Act, 43 U.S.C. §§ 395, 397A, Trans-Elect is providing the Initial Funds for the purposes described in the LA.
2. Western will provide Trans-Elect with its federal account numbers where the Initial Fund shall be wired.
3. Trans Elect will wire the Initial Fund ($1,500,000) to an account number provided by Western.

Executed: April 25, 2002

Western Area Power Administration
Sierra Nevada Region

Los Banos - Gates 500kV Transmission Line
Preliminary Estimate - Funding by Fiscal Year

IN THOUSANDS 000

Revised March 05, 2002

	FY01		FY02		FY03		FY04		
	PD	Other	PD	Other	PD	Other	PD	Other	Total Funding
Planning									$ -
Technical Studies	$ 10	$ -	$ 100	$ -	$ -	$ -	$ -	$ -	$ 110
Transients (EMTP)	$ -	$ -	$ 100	$ -	$ -	$ -	$ -	$ -	$ 100
									$ -
Environment (Update existing EIS)	$ 15	$ 60	$ 200	$ 300	$ -	$ -	$ -	$ -	$ 575
									$ -
CEQA									$ -
Permitting	$ -	$ -	$ -	$ 1,000	$ -	$ -	$ -	$ -	$ 1,000
Mitigation	$ -	$ -	$ -	$ -	$ 500	$ 10,000	$ 500	$ 4,000	$ 15,000
									$ -
Land									$ -
Pre-acquisition	$ 15	$ -	$ 2,000	$ -	$ -	$ -	$ -	$ -	$ 2,015
Acquisition	$ -	$ -	$ 500	$ 19,600	$ 500	$ -	$ -	$ -	$ 20,600
Access Roads	$ -	$ -	$ 1,200	$ 5,000	$ 1,200	$ 5,000	$ -	$ -	$ 12,400
									$ -
Field Data									$ -
Route determination	$ -	$ -	$ 400	$ 1,200	$ 200	$ 200	$ 200	$ 200	$ 2,400
Survey	$ -	$ -	$ -	$ 1,800	$ -	$ -	$ -	$ -	$ 1,800
Geology	$ -	$ -	$ -	$ 900	$ -	$ -	$ -	$ -	$ 900
									$ -
Design/Specs									$ -
Transmission Line	$ -	$ -	$ 600	$ -	$ 400	$ 200	$ 200	$ 200	$ 1,600
Access Roads	$ -	$ -	$ 250	$ 250	$ 250	$ 250	$ 100	$ 100	$ 1,200
									$ -
Materials									$ -
Transmission Line	$ -	$ -	$ -	0	$ -	$ 33,976		$ 2,027	$ 36,002
									$ -
Construction									$ -
ccess Roads(95 Miles)/Laydown yards	$ -	$ -	$ -	$ 5,000	$ -	$ 10,000	$ -	$ -	$ 15,000
Transmission Line	$ -	$ -	$ -	$ -	$ -	$ 30,854	$ -	$ 13,223	$ 44,077
									$ -
Construction Management									$ -
Transmission Line	$ -	$ -	$ -	$ 200	$ 800	$ 1,600	$ 800	$ 600	$ 4,000
									$ -
Project Management (1%)	$ 50	$ -	$ 600	$ -	$ 800	$ -	$ 540	$ -	$ 1,990
									$ -
Commissioning (Tline)	$ -	$ -	$ -	$ -	$ -	$ -	$ 200	$ -	$ 200
Old Costs	$ -	$ -	$ -	$ 6,000	$ -	$ -	$ -	$ -	$ 6,000
Contingency Percent	$ 0	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Totals	$ 90	$ 60	$ 5,950	$ 41,250	$ 4,650	$ 92,079	$ 2,540	$ 20,350	$ 166,969
Contingency Amount	$ 23	$ 15	$ 1,488	$ 10,313	$ 1,163	$ 23,020	$ 635	$ 5,087	$ 41,742
Grand Total	$ 113	$ 75	$ 7,438	$ 51,563	$ 5,813	$ 115,099	$ 3,175	$ 25,437	$ 208,711
Western FY Total	$ 188		$ 59,000		$ 120,912		$ 28,612		$ 208,711
									$ 208,711

PG&E's Substations Estimated	**$57,796**	**Includes cost of money**
Project Tline Estimated Costs	**$208,711**	
Cost of Debt @ 8.5%	**$39,365**	**On transmission line costs only**
Total Project Estimated Costs	**$305,872**	

Government Fiscal Year Runs From October through September

Western Area Power Administration
Sierra Nevada Region
Los Banos - Gates 500kV Transmission Line
Preliminary Estimate - Funding by Fiscal Year
Revised March 05, 2002

	FY01	FY02			FY03				FY04				FY05	
	Total	1st and 2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	Total Funding
Planning														$ -
Technical Studies	$ 10	$ 10	$ 25	$ 25	$ 25	$ 15								$ 110
Transients (EMTP)	$ -		$ 25	$ 25	$ 25	$ 25								$ 100
														$ -
Environment (Update existing EIS)	$ 75	$ 325	$ 400	$ 100	$ 125	$ 50								$ 1,075
Mitigation							$ 500	$ 5,000	$ 5,000	$ 1,000	$ 1,000	$ 2,000		$ 14,500
CEQA	$ -													$ -
Permitting	$ -			$ 1,000										$ 1,000
Mitigation	$ -													$ -
														$ -
Land	$ -													$ -
Pre-acquisition	$ 15	$ 615	$ 1,385											$ 2,015
Acquisition	$ -		$ 3,270	$ 16,680	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 100	$ 100		$ 20,600
Access Roads	$ -		$ 500	$ 1,000	$ 4,000	$ 4,000	$ 1,000	$ 1,000	$ 500	$ 400				$ 12,400
														$ -
Field Data	$ -													$ -
Route determination	$ -		$ 1,600		$ 200	$ 200			$ 100	$ 100	$ 100	$ 100		$ 2,400
Survey	$ -		$ 1,800											$ 1,800
Geology	$ -		$ 900											$ 900
														$ -
Design/Specs	$ -													$ -
Transmission Line	$ -		$ 300	$ 300	$ 300	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100	$ 100		$ 1,600
Access Roads	$ -		$ 250	$ 250	$ 200	$ 100	$ 100	$ 100	$ 50	$ 50	$ 50	$ 50		$ 1,200
														$ -
Materials	$ -													$ -
Transmission Line	$ -				$ 33,976		$ 2,027							$ 36,003
														$ -
Construction	$ -													$ -
Access Roads(95 Miles)/Laydown yards	$ -				$ 5,000	$ 5,000	$ 4,000	$ 1,000						$ 15,000
Transmission Line	$ -					$ 30,854	$ 4,223	$ 3,000	$ 3,000	$ 2,000	$ 1,000			$ 44,077
														$ -
Construction Management	$ -													$ -
Transmission Line	$ -			$ 200	$ 600	$ 600	$ 600	$ 600	$ 500	$ 500	$ 300	$ 100		$ 4,000
														$ -
Project Management (1%)	$ 50	$ 150	$ 200	$ 250	$ 200	$ 200	$ 200	$ 200	$ 135	$ 135	$ 135	$ 135		$ 1,990
														$ -
Commissioning (Tline)	$ -											$ 200		$ 200
Old Costs	$ -		$ 6,000											$ 6,000
Contingency Percent	$ 0													
Totals	$ 150	$ 1,100	$ 16,655	$ 19,830	$ 44,751	$ 41,244	$ 12,850	$ 11,050	$ 9,435	$ 4,335	$ 2,785	$ 2,785	$ -	$ 166,970
Contingency Amount	$ 38	$ 275	$ 4,164	$ 4,958	$ 11,188	$ 10,311	$ 3,213	$ 2,763	$ 2,359	$ 1,084	$ 696	$ 696	$ -	$ 41,743
Grand Total	$ 188	$ 1,375	$ 20,819	$ 24,788	$ 55,939	$ 51,555	$ 16,063	$ 13,813	$ 11,794	$ 5,419	$ 3,481	$ 3,481	$ -	$ 208,713
Western FY Total	$ 188	$ -	$ -	$ 46,981	$ -	$ -	$ -	$ 137,369	$ -	$ -	$ -	$ 24,175	$ -	$ 208,713
PG&E's Substations Estimated Cost	**$57,796**													
Project Tline Estimated Costs	**$208,713**													
Cost of Debt @ 8.5%	**$39,365**													
Total Project Estimated Costs	**$305,874**													
Government Fiscal Year Runs From October through September														

1st Qtr October through December
2nd Qtr January through March
3rd Qtr April through June
4th Qtr July though September
Funds are to be deposited within 10 days of the beginning of the appropriate quarter.

Attachment B

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person identified below:

Charles F. Robinson, Esq.
Roger E. Smith, Esq.
California Independent System Operator Corp.
151 Blue Ravine Rd.
Folsom, CA 95630

Ms. Debbie Levine
California Independent System Operator Corp.
151 Blue Ravine Rd.
Folsom, CA 95630

California Public Utility Commission
Gary M. Cohen
General Counsel
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94103

Dated at Lakewood, Colorado, this 29th day of April 2002.

By
Sandi Parker
Office of General Counsel
Western Area Power Administration
P.O. Box 281213
Lakewood, CO 80228-8213
(720) 962-7010
(720) 962-7009 (fax)

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Trans-Elect, Inc., Pacific Gas and Electric Company, and Western Area Power Administration	)))))	Docket No. ER02-_____

NOTICE OF FILING
(_____, 2002)

Take notice that on April __, 2002, Trans-Elect, Inc., Pacific Gas and Electric Company and Western Area Power Administration submitted for filing pursuant to Section 205 of the Federal Power Act and Section 35.13 of the Commission's Rules and Regulations the Path 15 Upgrade Project Participant's Letter Agreement (Letter Agreement). This Letter Agreement is an essential ingredient in the Path 15 Upgrades Project. It identifies the parties' obligations, expected rate methodologies and a blueprint for continued progress. The Project Participants state that it has served copies of this filing upon the California Public Utilities Commission and the California Independent System Operator Corp.

Any person desiring to intervene or to protest this filing should file with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. All such motions or protests should be filed on or before the comment date, and, to the extent applicable, must be served on the applicant and on any other person designated on the official service list. This filing is available for review at the Commission or may be viewed on the Commission's web site at http://www.ferc.gov using the "RIMS" link, select "Docket #" and follow the instructions (call 202-208-2222 for assistance). Protests and interventions may be filed

electronically via the Internet in lieu of paper; see 18 CFR 385.2001(a)(1)(iii) and the instructions on the Commission's web site under the "e-Filing" link.

Attachment 4

Notice of Intervention and Protest of the Public Utilities Commission of the State of California

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

STATE OF CALIFORNIA GRAY DAVIS, *Governor*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

May 21, 2002

Via Electronic Delivery

Magalie Roman Salas
Office of the Secretary
Docket Room
Federal Energy Regulatory Commission
888 First Street, N.E., Room 1A, East
Washington, D.C. 20002

Dear Ms. Salas:

Re: **Notice of Intervention and Protest of the Public Utilities Commission of the State of California**, Docket No. ER02-1672-000

Enclosed for filing in the above-docketed case, please find an electronic filing of a document entitled **"NOTICE OF INTERVENTION AND PROTEST OF THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA."**

Thank you for your cooperation in this matter.

Sincerely,

/s/ TODD EDMISTER

Todd Edmister
Staff Counsel

TOD:abh

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Western Area Power Administration Pacific Gas and Electric Company Trans-Elect, Inc.	Docket No. ER02-1672-000

NOTICE OF INTERVENTION AND PROTEST OF THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Pursuant to Rules 211, 212 and 214 (a), of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("FERC"), the Public Utilities Commission of the State of California ("CPUC") hereby intervenes, protests and moves for summary rejection of the submittals in the above-docketed proceedings. In this docket, the Western Area Power Administration ("WAPA") has tendered for filing at the FERC a Letter Agreement ("LA") amongst itself, Trans-Elect, Inc. ("Trans-Elect") and Pacific Gas and Electric Company ("PG&E") (collectively, the "Participants") concerning upgrades to Path 15.[1]

I. INTERVENTION

The CPUC is a constitutionally established agency charged with the responsibility for regulating electric corporations within the State of California. In addition, the CPUC

[1] The recitals in the LA state that "the Path 15 Project is expected to consist of: constructing a new 84-mile, 500-kilovolt (kV) transmission line between the PG&E's Los Banos and Gates substations in Central California; terminal work at both substations; and certain 230-kV system reinforcements."

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

has a statutory mandate to represent the interests of electric consumers throughout California in proceedings before the FERC.

The names and addresses of persons to whom communications should be addressed are:

Mr. Todd O. Edmister
Public Utilities Commission of the
State of California
505 Van Ness Avenue, Room 5035
San Francisco, California 94102
(415) 703-4443
tod@cpuc.ca.gov

Mr. James Loewen
Public Utilities Commission of the
State of California
505 Van Ness Avenue
San Francisco, California 94102
(415) 703-1866
loe@cpuc.ca.gov

Ms. Arocles Aguilar
Public Utilities Commission of the
State of California
505 Van Ness Avenue, Room 5128
San Francisco, California 94102
(415) 703-2969
aro@cpuc.ca.gov

This intervention serves to make the CPUC a party to this proceeding.

II. PROTEST

A. Summary of This Protest

The LA delineates spheres of responsibility for the project amongst WAPA, PG&E, and Trans-Elect, allocates ownership and transmission rights on the project, and proposes ratemaking treatment for PG&E and Trans-Elect. The filing is premature, for a number of reasons, the most significant of which is that the CPUC has not yet determined that the project is necessary. There is no reason to establish rates for a line that may prove unnecessary, and thus never be built. There is also an insufficient evidentiary record to support the ratemaking treatment that the Participants request. In addition, the proposed

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

expansion of the Removing Obstacles order's ratemaking treatment to this project is overly generous to PG&E and Trans-Elect. Trans-Elect's request for a rate moratorium should be denied as too vague to approve. Finally, the proposed allocation of rights allocates a disproportionate share of transmission rights on the project to WAPA.

B. Description of WAPA's filing

In this docket, the WAPA has tendered for filing at the FERC a Letter Agreement ("LA") amongst itself, Trans-Elect, and Pacific Gas and Electric Company ("PG&E") concerning upgrades to Path 15. In the cover letter accompanying the LA, WAPA characterizes PG&E and Trans-Elect as "among those Western selected to participate in the construction of the Los Banos-Gates Transmission Line -- the Path 15 upgrade." The LA delineates spheres of responsibility for the project amongst WAPA, PG&E, and Trans-Elect, allocates ownership and transmission rights on the Los Banos-Gates line, and proposes ratemaking treatment for PG&E and Trans-Elect.

1. WAPA Asserts that the Project is Necessary

The cover letter sets forth a great deal of background regarding the need for the project, and the economic virtues thereof. The project cost is estimated at $306 million, with the cost "'potentially [] recovered within one drought year, plus three normal years.'" WAPA obtained this quote from ISO testimony in CPUC proceeding I.00-11-001/A.01-04-012 (the "CPUC's Transmission Investigation"). The project is expected to increase South to North transfer capacity by 1500 MW, bringing the total South-to-North capacity on Path 15 to 5400 MW. This estimate, too, comes from the ISO's testimony in the CPUC's Transmission Investigation.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

2. Ownership Rights and Transmission Rights

The LA establishes who will own the land, the lines, and the transmission rights on the lines when the project is complete. WAPA takes title to the land and the lines. PG&E will own the substations. Trans-Elect does not end up owning any physical assets, but receives the lion's share of the transmission rights on the project in return for funding the construction of the lines. Transmission rights will be apportioned amongst the project participants pro-rata based on contribution to project cost, with WAPA to receive a minimum of 10% of the project capacity. Initial capacity allocations based on forecast contributions to project cost are: 72% to Trans-Elect, 18 % to PG&E, and 10% to WAPA. Operational control over the lines is to be vested in the California Independent System Operator Corporation ("CAISO"). This will require CAISO tariff modifications that the CAISO has not yet agreed to make, to accommodate WAPA picking and choosing which of its lines to turn over to the CAISO.

3. Proposed Rate Treatment

In section 7 of the LA, both PG&E and Trans-Elect seek to have the FERC pre-approve application of the EL01-47 interim rate methodology to their portions of the project. In an order dated May 16, 2001 in EL01-47, Further Order on Removing Obstacles to Increased Energy Supply and Reduced Demand in the Western United States and Dismissing Petition for Rehearing, 95 FERC ¶ 61,225 (2001),[2] the FERC established highly favorable rate treatment – a 200 basis point increase in Return on Equity plus a 10

[2] The "Removing Obstacles" order

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

year depreciation schedule – for transmission projects in-service prior to July 1, 2001, with progressively lower bonuses available on a sliding-scale basis for projects on-line from July 1, 2001 to November 1, 2002. This project does not qualify for favorable treatment under the terms of the May 16, 2001 order, a fact acknowledged in WAPA's cover letter.[3] PG&E and Trans-Elect seek elements of the Removing Obstacles order's favorable treatment nonetheless. Trans-Elect also seeks pre-approval of a capital structure of 50/50 debt/equity.

Finally, Trans-Elect seeks a "rate moratorium," which appears to mean that whatever rate, or perhaps whatever rate treatment, is in effect when Trans-Elect begins recovering rates will not change for 36 months.[4]

4. Promises of future filings

It is not clear precisely what Participants want from the Commission. They state:

> The Participants requests acceptance of the Letter Agreement and approval of the rate methodologies contained in Section 7. While the Participants will make additional filings with the Commission, including a full cost of service.

It is not altogether clear what significance "acceptance" of the Letter Agreement would have. The LA itself provides for the future filing of a Participation Agreement, which will presumably flesh out in greater detail the arrangements between the parties. As near as can be determined, what the Participants want is just a generalized blessing of their

---

[3] "However, while Path 15 upgrades relieve one of the most notorious transmission constraints in the United States, its scheduled completion date falls outside the dates contained in the order." LA at 8.
[4] LA, section 7.2.1

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

ratemaking structure, capital structure (for Trans-Elect alone), and of their proposed allocation of transmission rights, with details (such as cost data) to be provided later.

C. Issues Raised by WAPA's filing

The CPUC believes that the Participants' filing is premature. The project has not been shown to be necessary, and the appropriateness of ratemaking treatment and the propriety of allocation of rights on the project are inextricably intertwined with the reasons why the project is necessary. In sum, the FERC should not establish rates or rights allocations without establishing whether, and why, the project is needed.

1. Procedural problems with the filing

a) The Filing is Premature; The CPUC is Currently Assessing the Need for the Project in Evidentiary Hearings, and Before the FERC Establishes any Rate Structure the Participants must Demonstrate that the Project is Needed

A need determination is essential prior to any approval of any portion of this project because if the FERC adopts the rate structure that the Participants have proposed, **the financial risks associated with this project will shift squarely onto ratepayers**. The Path 15 upgrade is not an example of the sort of "[e]ntrepreneurial effort[] to build merchant transmission lines that pose no financial risk to ratepayers . . ." that the DOE endorsed in its May 8, 2002, "Recommendations For Modernizing Transmission System." The Path 15 upgrade is a cost-of-service project, with a proposed ratemaking framework drawn from traditional cost-of-service precepts. The LA proposes a "fixed[5] revenue

---

[5] The CPUC interprets "fixed" in this context to refer to a revenue requirement *set* at a certain amount, rather than to refer to a revenue requirement covering only "fixed" (as opposed to variable) costs. Cf. *contra*, California Independent System Operator Corporation, 87 FERC 61,250 (1999), approving a pro-forma RMR agreement that

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

requirement . . . recoverable from the CAISO" for Trans-Elect, and "[f]ull recovery of all of its reasonably incurred Project Costs" for PG&E. (LA, §§ 7.2.1, 7.3.1) If accepted by the FERC, this proposed ratemaking treatment will place the financial risks of this line proving unnecessary onto ratepayers. Before burdening ratepayers with this risk, the FERC should look closely at whether the line is necessary.

The CPUC has, in the CPUC's Transmission Investigation, set out to determine whether the Path 15 upgrades proposed here are necessary. In the CPUC's Transmission Investigation, the CPUC is examining the economics of upgrading Path 15, as well as the economic need for projects that address other major transmission system constraints. The CPUC initiated its investigation in response to the system capacity problems experienced during 2000. Consistent with the directives of California State Assembly Bill (AB) 970, the CPUC's Transmission Investigation is the CPUC's consolidated proceeding for assessing the need for proposed transmission upgrades within California and to regions outside of California.

In the course of the CPUC's Transmission Investigation, the CPUC is evaluating the need for upgrades to Path 15. Evidentiary hearings on the economic benefits of Path 15 concluded in late March, 2002 and the case was submitted with the filing of reply briefs on April 22, 2002. The CPUC is reviewing the extensive record in this highly contested case, a record that includes thirty technical exhibits on methodology, input assumptions and study results.

---

establishes an Annual Fixed Revenue Requirement for recovery only of "fixed" as opposed to "variable" generation costs.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

In their filing before FERC, the Participants present selected excerpts from the CAISO's opening testimony in the CPUC's Transmission Investigation.[6] The CPUC (the ultimate trier of fact in the CPUC's Transmission Investigation) is concerned that the Participant's presentation fails to address (or even acknowledge) the numerous questions that parties to the CPUC's Transmission Investigation raised regarding the CAISO study referenced in the excerpted testimony. The CPUC wishes to avoid any perception in the instant docket that it is prejudging the outcome of the CPUC's Transmission Investigation, but must point out that the Participants' submittal does not do justice to the issues presented in the CPUC's Transmission Investigation, which is a heavily contested proceeding. We seek to make clear to the FERC, as well as to the parties involved in the CPUC's Transmission Investigation, that the CPUC is evaluating whether the ISO's assumptions and approach to modeling the reduction in market power attributable to the project are reasonable. So that the FERC can better understand the debate, the CPUC must point out that the ISO's own study scenarios indicate that the Path 15 upgrade is not cost-effective if one assumes that the market power experienced in 2000 is mitigated fully (i.e., no longer exists) by 2005.[7] The CPUC notes, again without taking a position on the merits at this time, that it has received testimony in the Transmission Investigation that asserts that only under scenarios where market power is still pervasive in electric markets at the level projected by the ISO does the Path 15 upgrade seem to deliver the sizable

---

[6] It should be noted that the CAISO prepared the economic study of Path 15, and that PG&E has taken no position in the CPUC's Transmission Investigation on the economics of the Path 15 upgrade.

[7] Report on The Path 15 Project, Office of Ratepayer Advocates, November 2001 (Exhibit 217 in A.01-04-012/I.00-11-001); Testimony of Keith Casey and Mark Willis On Behalf of the California Independent System Operator, September 25, 2001, Attachment 3. (Exhibit 201in A.01-04-012/I.00-11-001)

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

economic benefits to ratepayers that the Participants reference.[8] The CPUC further notes that evidence has been placed before it that indicates that the level of market power mitigation benefits attributable to the Path 15 upgrade turns largely on assumptions regarding: (1) hydro conditions, (2) the availability of unused capacity from existing transmission contracts, and (3) new generation development, and all these assumptions are subject to challenge. Finally, the CPUC observes that the Participants' filing before FERC fails to acknowledge that, in response to questioning during evidentiary hearings at the CPUC, the ISO reduced its estimates of expected economic benefits, and modified the project payback calculations, from the numbers it originally submitted in opening testimony.[9] The CPUC takes no position on the merits of any of the above discussed positions at this time, but believes it important that the FERC be aware that there are parties asserting positions at the CPUC that are contrary to the positions presented by the Participants here regarding whether this project is in fact necessary.

In sum, the issue of whether this project is needed is being addressed in the CPUC's Transmission Investigation. Before agreeing to any ratemaking treatment for this project, and before accepting any conclusions about the economic benefits, or the overall cost-effectiveness, of the project, the FERC should allow the CPUC to complete its review of the extensive record in the Transmission Investigation and assess the economic need for the project.

---

[8] Testimony of Keith Casey and Mark Willis On Behalf of the California Independent System Operator in A.01-04-012, September 25, 2001, Attachment 4. ((Exhibit 201 in A.01-04-012/I.00-11-001)
[9] ISO Opening Brief, April 10, 2002.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

b) It is Inappropriate to Establish Ratemaking Treatment Before the Project is Used-and-Useful, and, if the Project Never Becomes Used-and-Useful, Participants' Recovery Should be Limited

The FERC should, at a minimum, require Participants to clarify that Section 7.2 of the LA does not mean that Trans-Elect will recover from CAISO ratepayers whether the line is used or not. Stated affirmatively, the FERC should order that cost-recovery be limited to no more than 50% of actual expenditures in the event that the line never becomes used and useful.

c) Trans-Elect's request for Approval of a Capital Structure is Premature

Trans-Elect asks the FERC to approve a "target" or "hypothetical" capital structure of 50/50 debt/equity. Trans-Elect has provided no evidence to support the justness and reasonableness of this number; in effect, Trans-Elect asks the FERC to approve Trans-Elect's proposed capital structure in a vacuum. The FERC can not properly evaluate Trans-Elect's proposed capital structure given the paucity of information provided here. And it does not appear that information useful in evaluating Trans-Elect's proposal exists, or will exist in the near future. There is no project in place yet; no funding; no market ratings of Trans-Elect debt or equity, no identification of comparable entities (much less an elaboration of these entities' capital structures), in short, nothing upon which to rest a reasoned evaluation of Trans-Elect's proposal.

> Where the subsidiary is wholly financed by the parent, the Commission has stated that it must impute a capital structure to the subsidiary. The Commission looks first to the risks facing parent and subsidiary. If the risks are similar, the consolidated capital structure is imputed to the subsidiary; but "(w)hen the risk profile of the parent and subsidiary are

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

> significantly different, we see no alternative to postulating a hypothetical capital structure for the subsidiary by referring to the average capital structure for comparable independent firms."[10]

Whether Trans-Elect's capital structure should be based on a hypothetical structure, or on that of its parent is a factual question that cannot be resolved on the record provided here. Whether the proposal here is just and reasonable, as determined by reference to the capital structures of other firms, is also a factual question. Trans-Elect has simply not provided a sufficient showing on this issue.

2. The Proposed Extension of the Removing Obstacles Order's Ratemaking Treatment to the Project will lead to Unjust and Unreasonable Rates; the Removing Obstacles Order's Emergency Provisions were interim in nature targeted at short to mid-term Transmission fixes, and should not be extended to this long-term project

In the Removing Obstacles order, the FERC focused "on short-term, immediate relief to the West . . ."[11] The FERC's decision to promote "short-term" and "immediate relief," came over the objections of numerous "commenters [on a draft of the Removing Obstacles order, who] state[d] that the time frame is too short to provide an incentive to construct and recommend that the incentive apply to those projects that are already underway,"[12] In the same vein, several entities submitted comments "urging the Commission to include projects with long construction lead times."[13] These comments notwithstanding, the FERC declined to expand the temporal scope of the Removing

---

[10] Consolidated Gas Supply Corporation v. Federal Energy Regulatory Commission, 653 F.2d 129 at 134 (citation omitted)(4th Cir. 1981).
[11] Removing Obstacles Order, mimeo at 28.
[12] Id., mimeo at 8.
[13] Id.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

Obstacles order, and stated that: "[t]he proposed rate of return premiums adopted herein will apply only to projects built under these incentives."[14]

In the face of this admonition, with an admittedly out-of-time project, the Participants seek the most favorable treatment offered under the Removing Obstacles order. The Participants might have more modestly sought only the rates available to those at the tail end of the order's reach. However, PG&E seeks, for a project expected in-service no sooner than the end of 2004, both the ROE and depreciation treatment that the Removing Obstacles order offered only for projects in-service by July 1, 2001.[15] Trans-Elect seeks the same ROE as that sought by PG&E, though Trans-Elect is eschewing the 10-year depreciation schedule in favor of a 30 year depreciation schedule.

Ignoring the paradoxical result that FERC acceptance of Participants' request will yield more favorable rate treatment for the Participants' project than for a project in-service two years earlier,[16] participants rest their request for the Removing Obstacles Order's more favorable than normal rate treatment on the assertion that this project is consistent with two principles articulated in the Removing Obstacles Order itself. First, Participants state:

> Specifically, the Removing Obstacles Order indicates the Commission's desire "to elicit whatever additional electric supply there is from existing resources and, equally important, to identify and work constructively on medium and longer

---

[14] Id., mimeo at 11.
[15] The Removing Obstacles order established a sliding scale of premiums on equity return, and accelerated depreciation, for Transmission projects, The later the in-service date, the lower the premium, with the premiums ending altogether for projects with in-service dates after November 2, 2002.
[16] Under the Removing Obstacles order a project in-service between November 1, 2001 and November 2, 2002 would be eligible only for a 150 basis point increase in ROE, and a 15 year depreciable life. Removing Obstacles order, 95 FERC P 61,225, mimeo at 10-11 (2001).

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

> term solutions, including new infrastructure that can help avert future recurrences of the current electric supply shortage in the West."[17]

Second, Participants state:

> the Removing Obstacles Order further provides that "the Commission reiterates the urgent need to do what it can to alleviate the ongoing energy situation facing the West and generally affirms its approach in providing incentives and removing obstacles to increased energy supply in the West."[18]

But Participants fail to point out how central rapid completion of projects was to the FERC's decision. As the FERC stated in defense of its decision to not expand the Removing Obstacles order's rate treatment to projects in-service after November 1, 2002,

> "We are retaining the original deadlines for project completion necessary to receive these incentives because the whole purpose of these incentives is to spur immediate action in order to alleviate the severe shortage of capacity in California and other problems facing Western electric energy markets."[19]

It would be inappropriate for the FERC to reverse itself here, for a project that will not be in-service until years after the expiration of the last date for qualifying for Removing Obstacles order rate treatment; for a project the need for which has not yet been established; and for a project that is not yet cost-justified.

Participants intimate that financial support for the project may be contingent on PG&E and Trans-Elect receiving this more favorable rate treatment.[20] If, as participants

---

[17] LA at 8-9 (citation to Removing Obstacles order omitted)
[18] LA at 9-10 (citation to Removing Obstacles order omitted)
[19] Removing Obstacles order, mimeo at 11.
[20] "This [the fact that the project completion date comes too late to qualify the project for special rate treatment under the Removing Obstacles order] has raised significant concerns among the financial institutions that are participating in the construction." LA at 8. Similarly: "[t]he specific rate incentives are key to the increased interest

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

imply, the financial community will only fund transmission projects if offered the Removing Obstacles orders' 200 basis point bump in ROE, and 10-year depreciable life, then we have discovered yet another increased cost of restructuring. Such measures were not generally necessary historically to induce construction of transmission projects, and the implication that transmission projects henceforth will be built only if rate premiums are available portends ill for the future. In its comments on the draft Removing Obstacles order, the Transmission Agency of Northern California expressed "caution[ed] the Commission against irreparably harming the existing [rate of return] structure."[21] Allowing the exceptional ROE and depreciation treatments in the Removing Obstacles order to apply to a standard transmission upgrade such as this will certainly reflect precisely the abandonment of traditional ratemaking principles against which TANC warned.

Participants go on to argue that "[c]ontinued adherence and observation of these Removing Obstacles Order principles provides much needed certainty to both the ratepayers and the financial institutions." Ratepayers and financial institutions alike can receive comparable "certainty" without a 200-basis point bump-up in ROE, and accelerated depreciation schedules. Indeed, the CPUC fails to see how extending these perks long past their expiration date will have any impact on rate variability. The only thing they make more certain (as compared to a rate structure featuring a normal rate of return and normal depreciation) is higher rates.

---

in development of the Path 15 Upgrades and in bringing new parties who are willing to provide funding, where others have been unable to do so." LA at 9.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

The CPUC also challenges the proposed 30-year depreciation period requested by Trans-Elect. This request is not supported by any evidence, and the appropriate depreciation rate is a factual question.

3. The proposed allocation of rights is Unjust and Unreasonable, as WAPA's Guaranteed Minimum Share of 10% of Transmission Rights on the Project, Regardless of Contribution, is Excessive

Section 3.2 of the LA provides generally that project participants will receive rights on the project commensurate with their financial contribution to the project.[22] Both Trans-Elect and PG&E's Initial Allocations are contingent on financial contributions to the project, with PG&E receiving an Initial Allocation "based on the ration of the estimated costs for PG&E's Substation modifications to the entire Project cost,"[23] and Trans-Elect receiving an Initial Allocation "based on the ration of the estimated funds it will provide for the Transmission Line to the entire project."[24] Final allocations will be determined "based on the ratio of the contribution made by a Participant to the Project either in terms of funding or actual work performed." Thus, assuming that actual costs track current cost estimates, each 10% share or project Entitlements will cost PG&E or Trans-Elect $30.6 million in project contributions, whether in cash or in-kind.

WAPA, however, receives its allocation based on a different set of rules. WAPA is guaranteed a minimum of 10% of the rights on the project, irrespective of actual contributions by WAPA. Exhibit B to the LA, entitled "Summary Estimate of

---

[21] Removing Obstacles order, mimeo at 9.
[22] LA section 3.2: "As a result of their contribution to the Project each entity will receive an allocation of Entitlement . . ."
[23] LA section 3.2.1.
[24] Id.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

Participant's Project Costs," reveals that WAPA's expected dollar investment in the project is $1.3 million. This totals approximately .03% of the project's expected costs.

WAPA's allocation may increase from the minimum 10% if "Congress appropriates to [WAPA] additional funding that exceeds the cost of the Land for this Project . . . on a ratio for the amount appropriated in excess of the cost of the Land to the entire Project costs. This will be added to [WAPA]'s Final Allocation."[25] Should land costs be $10 million, and should Congress appropriate $5 million for the project, and if, as forecast, the project costs $306 million, WAPA's final allocation would increase by 5/306ths, or 1.6%, to a total of 11.6 %, on a total contribution of $11.3 million. To obtain comparable rights would cost PG&E or Trans-Elect $35.6 million.

The CPUC protests the disproportionate allocation of project Entitlements to WAPA. WAPA is getting for $1.3 million a project Entitlement for which the other participants would have to pay $30.6 million, with the possibility of still more rights becoming available under LA section 3.2.2. Under the ISO's current Transmission Access Charge ("TAC") rate methodology,[26] the costs of the project will be spread statewide to all ratepayers currently paying the TAC. But under the allocation methodology proposed in the LA, the Entitlements will not flow along the costs – the Entitlements will vest disproportionately in WAPA. The CPUC believes that TAC ratepayers should get what they pay for, which here is forecast to be 99.7% of the project.

---

[25] LA section 3.2.2.1.
[26] See CAISO Tariff Appendix F, schedule 3.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

4. Trans-Elect's Requested Rate Moratorium Should be Denied as Contrary to the FERC's Goal of Establishing Uniform Rate Structures for all Transmission Owners

The concept behind Trans-Elect's request for a rate moratorium seems to be that Trans-Elect will be subject to whatever rate structure is in place for 36 months from the effective date of the rates. Amplifying a bit, it seems that the idea is that if the ISO tariff changes during the moratorium period, the tariff changes would not apply to Trans-Elect during the moratorium period.

As should be clear from the foregoing, the shape of the rate moratorium is unacceptably vague. It is not clear what rate or rate structure Trans-Elect proposes to lock in. It could be the TAC, but that rate structure itself is subject to change in Docket No. ER00-2019. It could be the ISO's recently submitted MD02 proposal. The answer to the question of what rate or rate methodology will control in part turns on what the effective date of Trans-Elect rate is to be, and that, too, is not clear, as no effective date is set forth in the submittal.

While the lack of detail itself should lead the FERC to deny the requested rate moratorium, the rate moratorium also poses a conceptual problem. As a general matter, all market participants should be subject to the same market rules. Exempting one PTO from an otherwise-applicable rate structure will inevitably create operational difficulties for the ISO settlements staff, and may lead to a significant disparity in how one PTO is treated vis-à-vis other PTOs, to the other PTOs' detriment. As a policy matter, the CPUC believes it important to maintain uniform treatment of PTOs within the ISO's Access Charge rate structure, or within a larger RTO's Access Charge rate structure.

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

D. Conclusion

At the outset of the Protest, the CPUC noted that it was unclear exactly what the Participants seek from the FERC, and that it was particularly unclear what it would mean for the FERC to "accept" as general a document as is submitted for filing here. For the foregoing reasons, the CPUC respectfully requests that the FERC summarily reject the submittal. Any re-filing should be contingent upon a CPUC determination that there is a need for the project. Furthermore, the FERC should make clear that when and if the Participants refile, they should submit proper cost-of-service data and, in Trans-Elect's case, data supporting any proposed capital structure and depreciation schedule. It should further be made clear that the window has closed for obtaining the Removing Obstacles order's special rate treatments. The FERC should state that Trans-Elect will be subject to the same rates and rate treatment as other PTOs.

In the alternative, the CPUC requests that this filing be suspended for the maximum permissible time and set for hearing.

Respectfully submitted,

GARY M. COHEN
AROCLES AGUILAR
TODD O. EDMISTER

By: /s/ TODD O. EDMISTER

TODD O. EDMISTER

505 Van Ness Ave.
San Francisco, CA 94102
Phone: (415) 703-2059

Attorneys for the Public Utilities Commission of the State of California

May 21, 2002

200205215039 Received FERC OSEC 05/21/2002 02:41:00 PM in Docket#: ER02-1672-000

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing document to be served upon all known parties of in this proceeding by mailing by first-class a copy properly addressed to each party.

Dated at San Francisco, California, this 21st day of May, 2002.

/s/ TODD O. EDMISTER

TODD O. EDMISTER

Attachment 5

Motion to Intervene and Comments of the California Independent System Operator Corporation

CALIFORNIA ISO

California Independent
System Operator

May 21, 2002

The Honorable Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: Western Area Power Administration, et al.
Docket No. ER02-1672-000

Dear Secretary Salas:

Enclosed for electronic filing in the above-captioned proceeding is the Motion to Intervene and Comments of the California Independent System Operator Corporation.

Thank you for your attention to this matter.

Respectfully submitted,

Jeanne M. Solé
Counsel for the California Independent
System Operator Corporation

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Western Area Power Administration	**)**	
Pacific Gas and Electric Company	**)**	**Docket No. ER02-1672-000**
Trans-Elect, Inc.	**)**	

MOTION TO INTERVENE AND COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Pursuant to Rule 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 385.214, and the Commission's May 7, 2002 Notice of Filing, the California Independent System Operator Corporation ("ISO") hereby moves to intervene in the above-captioned proceeding. In support thereof, the ISO states as follows[1]:

I. COMMUNICATIONS

Please address communications concerning this filing to the following persons:

Jeanne M. Solé
The California Independent System Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 608-7144
Fax: (916) 608-7220

David B. Rubin
Lynn M. Gallagher
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W., Suite 300
Washington, DC 20007
Tel: (202) 424-7500
Fax: (202) 424-7643

[1] Unless expressly stated otherwise, capitalized terms herein have the meaning set forth in Appendix A to the ISO Tariff, the Master Definitions Supplement.

II. BACKGROUND

On April 30, 2002, Western Area Power Administration-Sierra Nevada Region ("Western"), Pacific Gas and Electric Company (“PG&E”), and Trans-Elect, Inc. ("Trans-Elect") (hereinafter referred to as the “Project Participants”) tendered for filing with the Commission an agreement titled the “Path 15 Upgrade Project Participant’s [*sic*] Letter Agreement,” (hereinafter referred to as the “Letter Agreement”). The Letter Agreement sets forth the Project Participants’ obligations, expected rate methodologies, and a blueprint for continued progress on the Path 15 Upgrade Project.

The Path 15 Upgrade Project is a project designed to alleviate the transmission constraints that exist on Path 15, a major north-south transmission pathway in California. Specifically, the Project will involve the construction of a new 84-mile 500-kV transmission line between PG&E’s Los Banos and Gates substations in central California.

As part of the Letter Agreement, PG&E and Trans-Elect will turn over the Operational Control of their transmission capacity entitlements in the project to the ISO. Western will turn the Operational Control of its entitlement to the ISO provided that the ISO makes the necessary changes to its Tariff to allow Western to turn over Operational Control of the Path 15 upgrade without turning over control of all of its existing Central Valley Project ("CVP") system. In addition, the Letter Agreement outlines the parties’ proposed rate treatment for their respective shares of the transmission project, certain of which may require

modifications to the ISO Tariff and the process for transmission approval, and an amendment to the multi-party Transmission Control Agreement ("TCA").

III. BASIS FOR MOTION TO INTERVENE

The ISO is a non-profit public benefit corporation organized under the laws of the State of California and responsible for the reliable operation of the transmission grid and for the coordination of the competitive electricity market in California. The ISO operates a grid comprising the transmission systems of PG&E, Southern California Edison Company ("SCE"), San Diego Gas and Electric Company ("SDG&E"), and the City of Vernon, California ("Vernon"). In this capacity, the ISO believes that it has a unique interest in any Commission proceeding concerning the Letter Agreement described above. Specifically, (1) the ISO will be the operator of the Path 15 project upgrade upon its completion; (2) Path 15 is a key transmission facility within the ISO Controlled Grid; (3) it has been proposed that the costs of the project are to be recovered in the ISO Access Charge; and (4) the project as described in the Letter Agreement requires modification of the TCA between PG&E, SCE, SDG&E and Vernon to include Western and Trans-Elect, and an amendment to PG&E's transmission rights to include this upgrade; and (5) the project as described in the Letter Agreement may require modifications to the ISO Tariff related to cost recovery.

IV. COMMENTS

In concept, the ISO fully supports upgrading Path 15. In September of 2001, the ISO completed an economic assessment of the market power mitigation benefits of upgrading Path 15. These benefits were shown to be

considerable. In addition, the ISO considers that there are ancillary benefits to system reliability from a Path 15 upgrade. Thus, the ISO generally supports proposals to upgrade Path 15.

Nonetheless, the Project Participants' proposal raises important issues and potential concerns, the resolution of which may substantially impact the ISO. The ISO has met with the Project Participants during the past months to provide information regarding the Participating TO application process, the TCA, and the ISO Tariff requirements including settlements. Nonetheless, as of this date, the Project Participants have not provided the ISO with the detail of their proposals, including proposed changes to the ISO Tariff. Once the ISO receives this information, the ISO is committed to working with the Project Participants and all interested parties to fully understand and, if possible, resolve any outstanding issues. However, without all the information necessary to fully substantively assess the impact (or import) of the Project Participant's proposals, the ISO has concerns about some of the concepts set forth in the Letter Agreement.

Under the TCA, Participating TOs are to transfer to the ISO's Operational Control "transmission lines and associated facilities forming part of the transmission network that it owns or to which it has Entitlements."[2] The purpose of this provision was to prevent new Participating TOs from "cherry picking" -- turning over to the ISO Operational Control of less desirable or more expensive projects while maintaining sole control over valuable or less expensive transmission assets. This concern arises because the ISO's Access Charge is in

---

[2] TCA Section 4.1.1.

the second year of a ten-year transition period that will result in one rate for the use of the High Voltage Transmission Facilities that make up the ISO Control Grid. Western seeks a special provision that would allow Western to turn over Operational Control of only its entitlement to the Path 15 Project Upgrade, not all of its CVP facilities. Filing letter at 13.

The ISO recognizes the importance of the Path 15 upgrade and has expressed its willingness to accept control only of this upgrade and not the remaining portions of Western's system. For example, the ISO made a settlement offer in the pending Docket No. ER00-2019-000 that would allow such a partial turnover of Western's facilities. If those settlement negotiations are not concluded in a way that would allow the treatment that Western seeks, however, the ISO is committed to work with the Project Participants to reach an acceptable resolution to this issue. The ISO notes, however, that the TCA is a multi-party agreement between the ISO and the four current Participating TO's, PG&E, SCE, SDG&E and Vernon. Any modification to the TCA would require that all signatories agree to the change. In addition, while it does not appear from the Letter Agreement that Trans-Elect presents issues which would require modification of the TCA, there is nonetheless a process that must be undertaken to amend the TCA to include Trans-Elect. Further, there is a process under the ISO Tariff for Trans-Elect to join the ISO and have its Transmission Revenue Requirement recovered through the ISO's Access Charge. These processes have not yet occurred.

Similarly, as proposed in section 9.4.4 of the Letter Agreement, the Project Participants seek changes to the ISO Tariff "requested by Trans-Elect for the revenue recovery mechanism for the Project". The Transmittal Letter explains that "Trans-Elect seeks to bar the CA ISO from commingling transmission revenues with generation related revenues". The ISO has requested that Trans-Elect convey to it a written explanation of the proposal and the specific tariff amendments sought. Any type of change to the ISO Tariff along these lines would impact all Market Participants in the California market. While it has not yet received this information, the ISO is generally concerned about any proposal that would change the assessment of charges and disbursement of funds pursuant to the ISO Tariff.

The ISO is cognizant that all Participating TOs (as well as all Market Participants) must be treated on a fair and non-discriminatory basis. This is particularly important because under the proposed ISO Tariff provisions, the Transmission Revenue Requirements associated with new High Voltage Transmission Facilities rated at or above 200 Kv are paid by all customers taking service over the ISO Controlled Grid on an ISO grid-wide basis. Thus, since it appears from the Letter Agreement that customers of PG&E, SDG&E, SCE, and Vernon as well as all wheeling customers will pay a portion of the Transmission Revenue Requirement associated with a Path 15 upgrade, it would likely prove difficult to justify a proposal for special treatment of the costs and revenues associated with the Path 15 upgrade. Indeed, since Trans-Elect does not have Load of its own, its Path 15 costs will be entirely born by others, further

emphasizing the need for careful consideration of this issue.. Moreover, the ISO's Access Charge is the subject of an ongoing settlement proceeding in Docket No. ER00-2019 pending before Chief Administrative Law Judge Curtis Wagner.

Also, as noted above, it appears from the Letter Agreement that Trans-Elect's proposal would by necessity require changes to the ISO Tariff. These changes are appropriately discussed in a larger forum and will require ISO Governing Board approval.

Finally, the ISO notes that while its September 2001 economic assessment identified substantial market power mitigation benefits from a Path 15 upgrade, the ISO has not yet performed an assessment to determine whether the costs of upgrading Path 15 in accordance with the Project Participants' proposal are offset by the market power mitigation benefits. Since the Project Participants have requested the ISO to seek Governing Board approval for the project, the ISO is working with the Project Participants to undertake a benefit-cost assessment but has not yet concluded the assessment.

In sum, the ISO supports an upgrade to Path 15. However, as noted above, there are a number of issues associated with the Project Participants' proposal that require careful consideration and that should not be summarily accepted by the Commission. Once all the requisite information is in hand, the ISO is committed to working with all interested parties to ensure timely and appropriate resolution of these issues.

V. CONCLUSION

For the foregoing reasons, the ISO respectfully requests that the Commission permit it to intervene, and that it be accorded full party status in this proceeding.

Respectfully submitted,

_____

Jeanne M. Solé
The California Independent
System Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 608-7144
Fax: (916) 608-7222

Counsel for the California Independent
System Operator Corporation

Date: May 21, 2002

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 21st day of May, 2002.

_____

Jeanne M. Solé
The California Independent
System Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630

Attachment 6

FERC Order Accepting Letter Agreement, Issued June 12, 2002

99 FERC 61, 306
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;
William L. Massey, Linda Breathitt,
and Nora Mead Brownell.

Western Area Power Administration Docket No. ER02-1672-000

ORDER ACCEPTING LETTER AGREEMENT

(Issued June 12, 2002)

On April 30, 2002, Western Area Power Administration (WAPA), on behalf of itself, Trans-Elect, Inc. (Trans-Elect), and Pacific Gas & Electric Company (PG&E) (collectively, Path 15 Participants or Applicants) filed a Letter Agreement, pursuant to section 205 [1] of the Federal Power Act (FPA), that constitutes the first step in a process that ultimately should lead to the addition of transmission capacity along California's Path 15 by late 2004. We will accept the Letter Agreement for filing, to become effective as of the date of this order. [2] Doing so promotes the construction of transmission facilities in California, particularly along Path 15. The need for additional transmission facilities in California, particularly along Path 15, has not abated since issuance of the Removing Obstacles Orders, [3] which sought, among other things, to promote just this result -- the timely construction of additional transmission facilities.

Background

[1] 16 U.S.C. 824d (1994).

[2] As we do not have before us an agreement establishing rates, we take no position, but rather reserve judgment, on all rate issues including those raised by the intervenors that are not specifically delineated as rate principles in Section 7 of the Letter Agreement; such issues are not before us at this time.

[3] Removing Obstacles to Increased Electric Generation and Natural Gas Supply in the Western United States, 94 FERC 61,272, reh'g denied, 95 FERC 61,225, order on requests for reh'g and clarification, 96 FERC 61,155, further order on requests for reh'g and clarification, 97 FERC 61,024 (2001) (Removing Obstacles Orders).

Path 15 encompasses two high voltage transmission lines that extend from southern California to northern California. Path 15 transmission lines are often constrained because of the need for significant north-to-south transmission to accommodate the movement of hydro power from the Pacific Northwest to Southern California and also to permit the movement of energy from generators in Southern California to Northern California.

On May 17, 2001, the National Energy Policy Report recommended that President George W. Bush direct the Secretary of Energy to authorize WAPA to explore ways to relieve the Path 15 bottleneck through transmission expansion. Through a public process, WAPA solicited proposals from non-federal entities to participate in the construction and ownership of Path 15 upgrades.[4] WAPA ultimately selected Trans-Elect and PG&E. The effect of the Path 15 upgrades agreed to by the Path 15 Participants, principally a new 500 kV transmission line, would be to increase capability from 3900 MW to 5400 MW for north-bound power deliveries. It would also increase capability for southbound deliveries. The expected completion date of the project is Fall 2004.

On April 30, 2002, the Path 15 Participants filed a Letter Agreement with the Commission in the instant docket, which, among other things, sets forth rate principles to be followed in the recovery of costs associated with the transmission upgrades.

Letter Agreement

Pursuant to the Letter Agreement, WAPA will own the new 500 kV transmission line and associated land that is the most significant part of the transmission upgrades, while PG&E will perform upgrades to preexisting substations and 230 kV transmission facilities. The Letter Agreement also provides that Trans-Elect, PG&E and WAPA each will receive an entitlement to the transmission system rights (TSRs). Initially, Trans-Elect will receive 72 percent, PG&E will receive 18 percent and WAPA will receive 10 percent of these TSRs. The final allocation of TSRs will be based on the ratio of the contribution made by a participant to the project either in terms of funding or actual work performed. However, in no event will WAPA's share be less than 10 percent. The estimated cost of the project is $306 million.

The Letter Agreement provides that Trans-Elect is responsible for raising approximately $250 million of equity and debt to fund the construction of the new 500 kV transmission line. Trans-Elect requests: (1) a 13.5 percent rate of return on equity for its portion of the project, consistent with what

[4] See 66 Fed. Reg. 31,909 (2001).

was granted in the Removing Obstacles Orders; (2) fixed rates at the initial rate level for the first 36 months of service; (3) a 30-year depreciable life for the project; and (4) use of a target 50/50 capital structure. Trans-Elect states that the target 50/50 capital structure is a necessary predicate for it to obtain financing for the project.

PG&E's participation in the project involves it making upgrades to preexisting substations and 230 kV transmission facilities. PG&E requests: (1) a 10-year depreciable life for PG&E's Path 15 Project facilities; (2) a reasonable industry target capital structure as requested by PG&E or ETrans (PG&E's transmission successor organization) in a subsequent rate filing (the project costs will be fully rolled into network rates and recoverable from all parties who take service under PG&E's transmission owner (TO) Tariff; PG&E, in a separate and subsequent filing, will file a comprehensive request with the specifics of cost recovery, according to the rate provision set out in Section 7.3 of the Letter Agreement); and (3) a reasonable rate of return on all of the Path 15 Project facilities it owns, plus a 200 basis point incentive consistent with the Commission's Removing Obstacles Orders.

WAPA, which is not a public utility under the FPA,[5] will provide about $1.33 million to the project.

Participation Agreement

Applicants state that they intend to sign a Participation Agreement no later than ten days after the Commission issues an order on the Letter Agreement. The Participation Agreement will provide more detail on the governance, ownership percentages, coordinated operations (including curtailment sharing) with the existing PG&E system, project work products and project scope. The Participation Agreement will also detail the nature of the ownership rights and responsibilities, including payment for project costs, coordination with the ISO and the mitigation of adverse impacts due to subsequent system modifications.

Notice of Filing, Protests and Interventions

Notice of Applicants' filing was published in the Federal Register,[6] with protests and motions to intervene due on or before May 21, 2002. In response, the Public Utilities Commission of California (California Commission) filed a notice

[5] See 16 U.S.C. 824 (1994).

[6] 67 Fed. Reg. 34,443 (2002).

of intervention and protest. Timely motions to intervene were filed by Modesto Irrigation District and the Sacramento Municipal Utility District. Timely motions to intervene and comments were filed by Turlock Irrigation District (Turlock), the California Independent System Operator Corporation (CA ISO), Northern California Power Agency (NCPA), and jointly by the Transmission Agency of Northern California, M-S-R Public Power Agency, and the Cities of Santa Clara, Redding, and Palo Alto, California (Joint Movants). A timely motion to intervene and protest was filed by Southern California Edison Company (SoCal Edison). Late-filed motions to intervene were filed by the California Department of Water Resources and the Metropolitan Water District of Southern California. A late-filed motion to intervene and protest was filed by San Diego Gas & Electric Company (SDG&E).

The California Commission argues that the filing is premature because the California Commission has not yet determined whether the proposed upgrades are necessary. The California Commission also argues that there is an insufficient evidentiary record to support the ratemaking treatment that the Path 15 Participants request. The California Commission further argues that the ratemaking treatment requested for this project is overly generous to PG&E and Trans-Elect and exceeds the incentives provided for in the Removing Obstacles Orders. Finally, the California Commission argues that the proposed allocation of TSRs allocates a disproportionate share of transmission rights to WAPA.

Turlock requests that the Commission ensure that the Path 15 upgrades will not have a negative impact on the current capability of Path 15 and specifically ensure that Turlock's rights of use will be fully protected and unhindered during the implementation of the upgrade and thereafter.

SDG&E's protest is limited to a request that the Commission require the Path 15 Participants to provide greater detail about their plans. SDG&E requests that the Commission direct Trans-Elect to provide a greater explanation of how it will recover its revenue requirement from the CA ISO and how the CA ISO would fund that requirement.

The Joint Movants agree with the Path 15 Participants that the Path 15 bottleneck is a serious problem in the California energy market and agree that the public interest will be best served if the Path 15 upgrade project is completed on an expedited basis. The primary interest of the Joint Movants at this stage of the proceeding is to ensure that the approval or the acceptance of the Letter Agreement does not have an adverse impact on the Joint Movants' existing rights, entitlements and allocations.

The Joint Movants acknowledge, however, that these concerns may be premature since such matters appear to be reserved or deferred. The Joint Movants state, though, that it would be helpful if the Commission provided guidance that addresses such matters. Furthermore, they ask the Commission to clarify that the Path 15 Participants must allow other entities to become project participants.

NCPA states that it does not oppose a much needed fix Path 15's congestion, even at the high compensatory rates sought here. However, NCPA is concerned about cost allocation and does not want approval of the Letter Agreement to be determinative of these issues.

SoCal Edison states that the transmission control agreement (TCA) and CA ISO open access tariff never contemplated "partial participating TOs." SoCal Edison states that unless WAPA can show that there are legal impediments to WAPA becoming a full participating TO, WAPA should not be allowed to become a partial participating TO. SoCal Edison adds that amendments are needed to both the TCA and CA ISO Tariff to implement the partial participating TO concept.

With regard to the Letter Agreement, itself, SoCal Edison questions various individual provisions, and how they interact with existing practices and agreements in California. SoCal Edison adds that all Path 15 facilities should be placed under the CA ISO-controlled grid and be available for use by all market participants on a comparable basis.

The CA ISO supports upgrading Path 15. The CA ISO has concerns, however, because the Path 15 Participants have not provided the CA ISO with the details of their proposals, including any necessary proposed changes to the CA ISO Tariff and the TCA. The CA ISO also notes that there is a process under the CA ISO s Tariff for Trans-Elect to join the CA ISO and have its transmission revenue requirement recovered through the CA ISO's Access Charge, and the CA ISO states that this process has not yet been initiated.

The CA ISO states that Section 9.4.4 of the Letter Agreement seeks changes to the CA ISO Tariff requested by Trans-Elect for the revenue recovery mechanism for the project. Trans-Elect seeks to bar the CA ISO from commingling transmission revenues with generation related revenues. The CA ISO states that any such change to the CA ISO Tariff would impact all market participants in the California market. The CA ISO is generally concerned about any proposal that would change the assessment of charges and disbursement of funds pursuant to the CA ISO Tariff. Since it appears that customers of PG&E, SDG&E, SCE, and Vernon, as well as all wheeling customers will pay a portion of the TRR associated with the Path 15 upgrade, it would likely prove

difficult to justify a proposal for special treatment of the costs and revenues associated with the Path 15 upgrade. Also, the CA ISO's Access Charge is the subject of an ongoing settlement proceeding in Docket No. ER00-2019-000 pending before Chief Administrative Law Judge Curtis Wagner.

On June 5, 2002, PG&E, Trans-Elect, and WAPA each filed answers to CPUC's protest.

Discussion

A. Interventions

The California Commission s notice of intervention and the timely motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214 of the Commission s Rules of Practice and Procedure, 18 C.F.R. 385.214 (2001), we will grant the untimely motions to intervene as we find that granting these interventions will not unduly delay the proceeding nor unduly prejudice the interests of any party. Pursuant to 18 C.F.R. 385.213(a)(2) (2001), we will reject PG&E, Trans-Elect, and WAPA's answers as impermissible answers to a protest.

B. Specified Rate Principles

Trans-Elect

The California Commission states that Trans-Elect's request for approval of a target capital structure is premature. The California Commission states that there is insufficient information available to examine Trans-Elect's proposal. Specifically, the California Commission states that there is no project in place yet, no funding, no market ratings of Trans-Elect's debt or equity, and no identification of comparable entities.

While we generally agree with the California Commission's characterization of Trans-Elect's participation, we disagree with the California Commission's argument that Trans-Elect's request for a target capital structure is premature. We find that a target capital structure is necessary to assure financing for this project. Accordingly, we will grant Trans-Elect's request to use a target capital structure.

Furthermore, Trans-Elect states that while these transactions are optimally leveraged at between 20 and 30 percent equity, its actual equity/debt ratio will vary dramatically over time and its equity portion may well be between 40 and 50 percent over a period of time. Trans-Elect states that it needs a 50/50 capital structure as a predicate for obtaining financing here.

We find a 50/50 capital structure is appropriate in this context and for this particular transaction. Our approval of the use of a target 50/50 capital structure for Trans-Elect at this time in this proceeding is due to the unique circumstances surrounding the Path 15 upgrades. The Path 15 upgrades project was the result of an RFP conducted by WAPA, at the behest of the Secretary of Energy, and represents, on balance, a reasonable basis for WAPA to move ahead with this much needed project. We also note that, at this time, there is no proxy group of entities similarly situated to Trans-Elect that would allow for a comparative analysis of the proposed capital structure. It is generally recognized that serious transmission congestion plagues the California energy markets, particularly along Path 15, and that the upgrades will provide much needed transmission capacity to northern California. This rate incentive will move the project forward. However, we will permit this 50/50 target capital structure for use in Trans-Elect's rates only for the first 36 months of operation. At the end of that period, Trans-Elect will be required to file with the Commission information reflecting its actual capital structure. We also find Trans-Elect's rate principles regarding its return on equity, depreciation and rate moratorium are reasonable for this unique project.

PG&E

PG&E requests a reasonable rate of return on all Path 15 Project facilities, plus a 200 basis point incentive. We agree that under the unique circumstances of this case a 200 basis point incentive is appropriate for PG&E's substation and other upgrades necessary to accommodate the new 84-mile, 500 kV transmission line. However, we will reject PG&E's request for a reasonable industry target capital structure as requested by PG&E or Etrans in a subsequent TO tariff filing. We granted Trans-Elect's request for a target capital structure because it is a relatively new company and must obtain the majority of the financing for the Path 15 upgrade. PG&E is a utility that has an established capital structure and, as such, the use of a target capital structure is not warranted under these circumstances. Finally, we approve PG&E's requested rate treatment regarding its proposed depreciation of the Path 15 Project facilities.

C. Other Issues

Intervenors raise various other issues regarding the Path 15 upgrades. We find these issues to be premature at this stage of the proceeding. Our acceptance of the Letter Agreement, and the rate principles therein, is intended to allow the Path 15 Participants to move forward with financing and preliminary matters and, as we discuss below, does it not constitute final Commission review of jurisdictional rates, terms and conditions

associated with the Path 15 upgrade project. We will, however, comment briefly on three matters.

First, many intervenors are concerned with protecting their transmission rights on pre-existing Path 15 facilities. We note that the Firm Transmission Rights (FTRs) at issue in the Letter Agreement pertain to rights on the new 500 kV transmission line and not to pre-existing Path 15 facilities. Final allocation of FTRs will be set out in the Participation Agreement, which will be filed with the Commission at a later date. To the extent intervenors have concerns that their pre-existing transmission rights will be adversely impacted by the Path 15 upgrades, they may raise those issues when the Participation Agreement is filed.

Second, many intervenors, including the California Commission express concerns that the Path 15 Participants, through the Letter Agreement, may be attempting to circumvent CA ISO Tariff procedures required for new participating transmission owners. We need not address these issues here, as we anticipate that there will be adequate opportunity to review these matters in the CA ISO tariff filings that the Path 15 Participants will be required to make. We note, however, that WAPA has committed to turn over control of the new Path 15 facilities to the CA ISO.

Third, with respect to California Commission's concerns regarding section 9.4.4 of the Letter Agreement, we note that the transmittal letter states that section 9.4.4 of the Letter Agreement identifies certain threshold conditions for further participation of some or all the parties, including a change by the CA ISO in how it handles the flow-through of payments to transmission owners. The California Commission is also concerned that Trans-Elect seeks to bar the CA ISO from commingling transmission revenues with generation revenues. However, section 9.4.4 states: "ISO Board approval indicating support for all changes to the ISO's Tariff or an order by the Commission requiring the CA ISO to accept the changes requested by Trans-Elect for the revenue recovery mechanism for the Project" must occur. Based on this language, we find that our acceptance of the Letter Agreement does not resolve one way or the other the issues raised by the California Commission regarding section 9.4.4, because we find that the intent of section 9.4.4 is vague and unclear on its face.

D. Conclusion

Our review of the Letter Agreement indicates that it appears to be just and reasonable and that it has not been shown to be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. Therefore, we will accept the Letter Agreement for filing. While we are accepting the Letter Agreement for filing, we note, however, that it is only a preliminary step that allows the Path 15 Participants to move

forward and not the last opportunity for the Commission to review matters that are subject to its jurisdiction. Accordingly, we are approving the rate making principles outlined in the Letter Agreement, as discussed and modified in this order, and our acceptance of this Letter Agreement is predicated on the Path 15 Participants' acknowledgment that, consistent with sections 9 and 13 of the Letter Agreement, they are required to make subsequent filings with the Commission which will address the intervenors concerns regarding non-rate principles.

The Commission orders:

Applicants Letter Agreement is hereby accepted for filing, as discussed in the body of this order.

By the Commission.

(S E A L)

Linwood A. Watson, Jr.,
Deputy Secretary.